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The Economist

APRIL 18TH–24TH 2009

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Politics this week

Apr 16th 2009
From The Economist print edition

Barack Obama's administration said that it was scrapping curbs on remittances and visits to **Cuba** by Cuban-Americans, and would allow American companies to offer telecoms services to Cubans. The announcement came days before a Summit of the Americas at which Latin American countries were expected to urge the United States to restore diplomatic relations with Cuba. Fidel Castro, Cuba's former president, said the measures were "positive" but "minimal". See article

Police in **Colombia** arrested the country's most-wanted drug-trafficker, Daniel Rendón, aka "Don Mario". Mr Rendón laid down his arms, along with other right-wing paramilitary leaders, three years ago, but quickly returned to life as a warlord in the Urabá region of the Caribbean coast.

Evo Morales, **Bolivia's** president, ended a five-day hunger strike after his government and the opposition reached agreement on a law that sets a general election for December. The government accepted the opposition's demand for a new electoral register. See article

Guerrillas from the Maoist Shining Path group killed 14 soldiers in two ambushes in a remote area of eastern **Peru**. The rump of the once-powerful guerrillas survives through drug-trafficking.

Venezuela's president, Hugo Chávez, appointed a member of his ruling party to a new post as head of government of Caracas, the capital, equipped with most of the powers and budget previously held by the elected mayor. Antonio Ledezma won last November's mayoral election in Caracas for the opposition.

Regional discord

Egypt's authorities accused Hizbullah, **Lebanon's** Shia party-cum-militia, of setting up espionage cells in Egypt with the aim of overthrowing Hosni Mubarak's regime and bolstering Hamas, the Palestinian Islamist group that rules the Gaza Strip across Egypt's border. The row accentuated the rift between Arab and Muslim countries that want to accommodate Israel and those that want to fight it. See article

Having changed the constitution to let himself have a third term, **Algeria's** ailing 72-year-old president, Abdelaziz Bouteflika, was re-elected against sparse opposition with more than 90% of votes cast in a high official turnout of 74%, which opposition parties said was a threefold exaggeration.

AFP

Pirates off the coast of **Somalia** seized more ships. This came after the captain of the American-crewed *Maersk Alabama* gave himself up to pirates as a hostage to secure the release of his vessel. Richard Phillips was eventually rescued in an operation co-ordinated by the American navy, in which snipers killed his assailants. See article

For the first time **South Africans** living outside their country were allowed to vote in a general election, casting early votes on April 15th. Their compatriots at home go to the polls on April 22nd, with the ruling African National Congress set to win again. See article

Ballot measure

After more violent protests in **Moldova**, the government began a recount of the disputed parliamentary election, won by the ruling Communists. After a savage crackdown, the president, Vladimir Voronin, called for an amnesty to be granted to the protesters. See article

France's fishermen yet again blockaded ports on their side of the English Channel to demand more subsidies and higher fish quotas. As usual, those who suffered most from the action were ferry

passengers to and from Britain. See article

AP

Hungary's parliament endorsed Gordon Bajnai as prime minister. Mr Bajnai, formerly the economy minister, chose a technocrat, Peter Oszko, for the crucial job of finance minister. Hungary secured a $25 billion rescue package from the IMF last year.

Poland became the second country after Mexico to seek a precautionary credit line from the IMF. The Poles are asking for $20.5 billion.

Back to square one?

After the UN Security Council issued a statement criticising its recent launch of a rocket, **North Korea** announced that it was pulling out of the six-country talks aimed at ending its nuclear-weapons programme. It expelled UN and American nuclear inspectors and said it would take steps to reactivate its partially dismantled nuclear facilities at Yongbyon.

AFP

Anti-government protesters in **Thailand** forced the cancellation of the ASEAN and East Asia summits being held in Pattaya. Some leaders were evacuated by helicopter. Protests continued in Bangkok, with demonstrators calling for the resignation of the prime minister, Abhisit Vejjajiva. Thaksin Shinawatra, the former prime minister deposed in a coup in 2006, called on his followers to stage a "revolution". After violent confrontations, the protests wound down. Two people died in the trouble. See article

Unofficial results from **Indonesia's** general election on April 9th suggested a big victory for the Democratic Party of the president, Susilo Bambang Yudhoyono, which tripled its share of the vote to about 20% and is poised to become the largest party in the parliament. See article

India's general election, which is staggered in five stages over four weeks, got under way. See article

A court in **Fiji** ruled that the interim government led by Frank Bainimarama was illegal. Fiji's president abrogated the constitution and reappointed Mr Bainimarama as prime minister. See article

Crossing a line

Janet Napolitano, America's homeland security chief, appointed Alan Bersin, a former federal prosecutor based in San Diego, as the first "**border tsar**". The Obama administration has promised to clamp down on cross-border flows of drugs, guns and migrants. Mr Bersin led a crackdown on illegal crossings at the California-Mexico border in the 1990s. See article

Legal proceedings rumbled on, trying to confirm a winner in last November's **Minnesota Senate race**. A panel of judges ruled that Al Franken, the Democrat, had won by a margin of 312 votes, but the incumbent Republican, Norm Coleman, seemed likely to lodge an appeal.

Rod Blagojevich pleaded not guilty to federal corruption charges. The former governor of Illinois was ousted from his job by the state legislature earlier this year. It is rumoured that Mr Blagojevich has been approached to take part in the reality TV show "I'm a Celebrity...Get Me Out of Here!"

Business this week

Apr 16th 2009
From The Economist print edition

The quarterly earnings season at America’s big banks got under way. **Goldman Sachs** surprised markets by reporting a net profit of $1.8 billion for the first quarter, 20% higher than a year ago and a stark contrast to the heavy losses it racked up at the end of 2008. Goldman also gave notice of its intention to raise $5 billion, equivalent to 9% of its current value, through a sale of common shares to help repay the $10 billion it got from a government bail-out. See article

JPMorgan Chase posted a net profit for the first quarter of $2.14 billion. **Wells Fargo** said it expected to make a $3 billion quarterly profit, a record for the bank, on the basis of a strong performance at its Wachovia unit. See article

On the mend?

UBS forecast a quarterly net loss of almost SFr2 billion ($1.8 billion). The Swiss bank, which has written down close to $50 billion on toxic assets since the start of the credit crisis, now expects to shed 8,700 jobs, or 11% of its global workforce, as part of a cost-cutting exercise.

Investors also pored over the earnings of technology companies for signs of recovery. **Intel’s** quarterly net profit fell by 55% compared with a year earlier, to $647m, and its revenue was down by 26%, though it did better than expected. The chipmaker judged that conditions remain too volatile for it to issue a reliable profit forecast, but it did declare that the personal-computer market may have “bottomed out”.

Mary Schapiro, the chairman of America’s Securities and Exchange Commission, called for an “intense review” of the function of **credit-rating agencies** in the markets. Rating agencies have been criticised for not downgrading debt sufficiently in the run-up to the financial crisis. Some observers say there is a conflict of interest, as the issuers of securities pay the agencies to rate them.

EBay announced plans to spin off **Skype** in an initial public offering next year. EBay bought Skype, which makes software to allow calls over the internet, in 2005, but the partnership proved a bad fit for both companies; eBay eventually wrote down the value of its investment by half. The online commerce company did consider selling Skype to a private-equity consortium.

Doing time, eventually

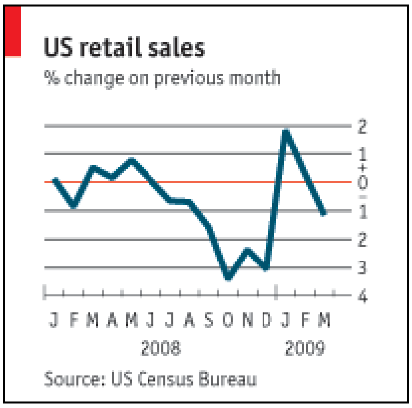
Joseph Nacchio was ordered to report to prison to begin a six-year jail term, two years after he was sentenced for insider trading. The former boss of Qwest, a telecoms company, was one of a number of executives convicted in a rash of high-profile corporate scandals several years ago. A federal appeals court recently upheld Mr Nacchio’s conviction.

Express Scripts agreed to buy **WellPoint’s** pharmacy-benefits management (PBM) business for $4.7 billion. PBMs administer the drug benefits provided through a company’s insurance scheme to employees. The deal gives Express Scripts the scale to compete on PBM services with rivals such as CVS Caremark, itself the product of a merger in 2007.

What to make of it all

Retail sales in America fell unexpectedly in March. **Consumer prices** dropped by 0.4% in the year to March, the first time they have fallen at an annual rate since 1955. And American **industrial production** fell again; the amount of industrial capacity in use dropped to 69.3%, the lowest since 1967.

More than 800,000 homes received a **foreclosure** filing in the first quarter, a record high according to a survey compiled by RealtyTrac, a property company. Meanwhile, **General Growth Properties**, which owns more than 200 malls, entered bankruptcy protection as it tries to rejig $27 billion in accumulated debt.



Nevertheless, Ben Bernanke, the chairman of the Federal Reserve, pointed to “tentative signs” from data in home sales, homebuilding and consumer spending that indicate “the sharp decline in economic activity may be slowing”. Barack Obama said there were “glimmers of hope” in **America’s economy**, but added that there would “be more pain” before the year is out.

China’s growth rate fell to 6.1% in the year to the first quarter, less than half of what it was in mid-2007. However, with some signs of economic recovery, notably an uptick in industrial production for the year to March, Beijing thinks China is still on track to achieve GDP growth of 8% this year. See article

The Treasury Department declined to tag China as a **currency manipulator** in a report. The (non) decision upset manufacturers and contradicted Tim Geithner’s statement to Congress in January, when he explicitly laid that charge. The treasury secretary thinks the yuan is still undervalued, but that China “had taken steps to enhance exchange-rate flexibility”.

KAL's cartoon

Apr 16th 2009
From The Economist print edition

Illustration by KAL

Africa's next Big Man

Apr 16th 2009
From The Economist print edition

If Jacob Zuma avoids becoming a caricature of African leadership, he could change the whole continent for the better

National News and Pictures

WITHIN weeks, Jacob Zuma is set to become the most powerful man in Africa, a continent of a billion souls that is still the poorest and, despite recent improvements, the worst governed on the planet. South Africa provides more than a third of the 48 sub-Saharan economies' total GDP. It is Africa's sole member of the G20 group of influential countries and packs a punch in global diplomacy. Its emergence from the gruesome era of apartheid is a miracle of reconciliation. Africans across the continent and oppressed peoples elsewhere still look to South Africa's leader as a beacon of hope.

The country's president is to be elected by Parliament after a general election on April 22nd which the dominant African National Congress (ANC) is sure to win again. As the party's candidate, Mr Zuma is unquestionably Africa's next "Big Man". But it is a phrase that goes to the heart of the continent's troubles. Too many African countries have been ruined by political chiefs for whom government is the accumulation of personal power and the dispensation of favours. That the revered Nelson Mandela's rainbow nation is now turning to a man of Mr Zuma's stamp may sharpen prejudices about Africa. It is for Mr Zuma to prove these doubters wrong.

He is undoubtedly a man of remarkable qualities (see article). In contrast to his dour predecessor, Thabo Mbeki, Mr Zuma can charm the birds out of the trees. Unlike the racially twitchy Mr Mbeki, he feels good in his skin, happy to acknowledge, even celebrate, his modest background. He properly educated himself only during his ten years as a prisoner on Robben Island, alongside Mr Mandela. Mr Zuma is charismatic and canny, as you would expect of a guerrilla who rose to be head of intelligence for the now-ruling ANC. He has been a wily negotiator, who magisterially ended the strife between his fellow Zulus in the early post-apartheid era. He connects easily with black slum-dwellers and white tycoons alike.

Big man, big problems

But his flaws are just as patent. He has been entangled for years in a thicket of embarrassing legal cases from which he has only recently been extricated—on a technicality. His financial adviser was sentenced to 15 years in prison for soliciting bribes for Mr Zuma. He has also been tried, and acquitted, on a rape charge. At the least, he has sailed perilously close to the wind. To put the kindest interpretation on his financial dealings, he has been naive and sloppy, not the best qualities for looking after Africa's biggest

economy. During his trial for the rape of an HIV-infected family friend, at the height of the AIDS plague in a country which has the world's highest recorded rate of rapes, he showed gross chauvinism and staggering ignorance, notoriously explaining that after having sex he had showered to stave off the disease. He is an illiberal populist, sneering at gays and hinting at bringing back the death penalty.

When it comes to policy, Mr Zuma travels light. In the wake of Mr Mbeki's shameful and lethal denial of the link between HIV and AIDS, he has overseen the appointment of a sensible new health minister. He seems to want the awful Robert Mugabe ousted in Zimbabwe, though his pronouncements have varied. Once a member of the South African Communist Party, which used to fawn on the Kremlin, he shamelessly switched to capitalism after his predecessors, Mr Mandela and Mr Mbeki, had persuaded the ANC to somersault away from socialism. These days he tells the hungry black majority that he has their interests at heart, while reassuring businessmen that he will not switch to high-tax redistribution. No one is sure in which direction he will push the economy, now wobbling after years of steady, commodity-fuelled growth.

As with all the other Big Men, the principal worries revolve around a fatal conflation of party and state. Given South Africa's racial and tribal mix, robustly independent bodies are vital, from Parliament and the judiciary to human-rights monitors, medical institutions and free media, but the ANC has stuffed all of them with party loyalists to entrench its hegemony. Candidate Zuma has seemed to rate loyalty to the ANC above all else, even the admirable constitution that the party itself was largely responsible for writing. It is not certain he believes in the need to separate powers, letting his fans hurl abuse at judges when they ruled against him.

Confound us all

President Zuma must grab his early chances to reassure the worriers. He should state unequivocally that he will not propose a law to render the head of state immune from criminal prosecution. He needs to resist the temptation to elevate some of his dodgier friends to high judicial posts. Parliament needs more bite to nip the heels of the executive; the present system of election by party lists shrivels the independence of members and needs reform. To curb cronyism, all MPs, ministers and board members of state-funded institutions should register their and their families' assets. He should also keep the sound Trevor Manuel as finance minister. Finally, Mr Zuma should ask his government to revise, perhaps even phase out, the policy of "black economic empowerment". This may have been necessary 15 years ago to put a chunk of the economy into black hands. But its main beneficiaries now are a coterie of ANC-linked people, not the poor masses.

Hardest of all for Mr Zuma to accept is that, in the longer run, South African democracy needs a sturdier opposition. The liberal Democratic Alliance, led by a brave white woman, Helen Zille, has good ideas but has failed to expand its appeal beyond a white core. The new Congress of the People, a black-led breakaway from the ANC, has able leaders, yet several are tainted by association with Mr Mbeki. With luck the opposition parties may stop the ANC from getting the two-thirds of parliamentary seats that would let it override the constitution.

Mr Zuma could yet prove to be the right sort of Big Man: big enough to hold his party back from creating something akin to a one-party state, big enough to accept that no one, himself included, is above the law. If that is how he chooses to spend his five years in power, South Africa would indeed serve as a model for the whole continent. But will he?

Democracy in India

India's jumbo election

Apr 16th 2009
From The Economist print edition

The worst possible way of choosing an Indian government—apart from all the others

Illustration by Jon Berkeley

LIKE a lumbering elephant embarking on an epic trek, India's general election got under way this week (see article). That it keeps going is something of a miracle. The scale is mind-boggling. It will be spread over five stages, taking four weeks and involving 6.5m staff. In 543 constituencies, 4,617 candidates, representing some 300 parties, will compete for the ballots of an electorate of 714m eligible voters. In 828,804 polling stations, 1,368,430 simple, robust and apparently tamper-proof electronic voting machines will be deployed. It is hard not to be impressed by the process—and its resilience.

A poor, diverse country of more than 30 main languages and six main religions, India also has, in the Hindu caste system, a tradition of hierarchy seemingly at odds with a system of universal suffrage. The country suffers security threats that would provide many a government with the excuse to suspend elections. Kashmir has been riven by insurgency for more than two decades; parts of the north-east for even longer. Maoist revolutionaries-cum-bandits stoke another fire in India's interior and staged attacks as polling began this week. Yet, apart from the brief months of the "emergency" in 1975, India has never curtailed its people's right to choose their rulers. And now, more than ever, that right is to be prized.

Singh if you're glad to be grey

The election comes amid the deepest global economic slump for two generations. India faces difficult choices as it seeks to escape the worst of the downturn. Voters have a chance to judge five years of government by a coalition led by the Congress party and its elderly prime minister, Manmohan Singh. It has presided over an unprecedented economic boom, and has continued the course of cautious liberalisation and globalisation followed by its predecessors. It has succeeded in raising India's international standing and, with its controversial agreement on civil nuclear co-operation with America, has accomplished an important strategic tilt.

Yet Mr Singh's government has made scant progress towards one of the main goals it set itself in 2004. This was to reform India's creaking, corrupt administrative structures so that policies formulated in Delhi might actually be implemented in the villages where most Indians still live. Partly because of that failure, and despite sharp falls in the poverty rate, appalling numbers of Indians are still desperately poor. One-quarter of the world's malnourished live in India, among them 40% of all Indian children under five. To Mr Singh's credit, it is the plight of the poorest, not India's GDP growth-figures, that is usually the starting-point for his policy speeches. This is also shrewd: the poor do not care about his achievements as a diplomat and globaliser, which scarcely impinge on their lives.

As in other countries, elections in India tend not to be dominated by grand national issues. And, as elsewhere, an Indian election may look splendid from a distance, but up close can be ugly. Campaigns are dominated by personalities, money and, in some places, intimidation. Many candidates seek votes through beggar-thy-neighbour appeals to the self-interest of a particular linguistic, caste or religious group.

Even in such an unpredictable contest, two outcomes are sadly fairly safe bets. First, parliament will have to make room for a lot of shady characters. Nearly a quarter of the current members have faced criminal charges. Nor are their alleged offences all petty. They include murder, rapes and kidnaps.

Second, the resulting national government will be a coalition, its policies held hostage by its smaller members. The secular trend in Indian politics is the gradual decline of the only truly “national” parties, Congress and the main opposition, the Bharatiya Janata Party (BJP). In 2004 the two combined won less than half (49%) of the votes. On the rise is a legion of regional and caste-based parties that do not even pretend to be guided by the national interest.

In part, the big parties can blame themselves for this. Congress, despite able technocrats, like Mr Singh, remains an antiquated dynastic machine. The prime ministership was bestowed on Mr Singh by Sonia Gandhi, the party’s Italian-born leader. He seems to be keeping the seat warm for her son, Rahul, a pleasant-seeming but unconvincing chap apparently destined to represent the fifth generation of his family to lead Congress. Nor is the economically liberal Mr Singh a typical Congress-man. Much of the party is still nostalgic for the Nehruvian socialism that for so long impeded India’s growth.

In power, the BJP also had a creditable record of economic management. But it has not escaped its origins as the political wing of the *Hindutva*, or “Hindu-ness” movement. That has an extremist fringe that has at times been guilty of terrible violence against India’s large Muslim minority and smaller Christian one, who may never trust BJP rule.

Better than the alternative

For this reason, *The Economist*, if it had a vote, would plump for Mr Singh’s Congress. But in reality, the choice between the two big parties is not the one on offer. In India the poor, proportionately, are more likely to vote than are the middle classes. It often makes sense for them to back regional parties campaigning on local issues: they are more likely to fulfil their promises. But it does make for hopelessly unwieldy governing coalitions. One solution would be to introduce national thresholds below which parties would be ineligible for seats in parliament. But reform would need the approval of those elected under present arrangements, so it is not on the cards.

Before yielding to despair over the intractability of political reform in India, it is worth considering the outcomes of recent elections. Since launching liberalising economic reform in 1991, India has had a succession of governments that have frustrated with their timidity, but have broadly kept the economy on track and avoided dangerous policy lurches—the BJP, to forge a coalition, had to ditch its core *Hindutva* demands, for example. Undemocratic governments might have been bolder, quicker and more efficient. But they might have been a whole lot worse, and certainly a whole lot harder to replace. Let the elephant lumber on.

American banks

Payback time

Apr 16th 2009
From The Economist print edition

Goldman Sachs and other banks want to pay back bail-out cash. But the banking system is not in the clear yet

Corbis

USING taxpayers' funds to prop up America's banking system was a necessary evil. So in many ways it is welcome that some banks now want to repay the money. On April 14th, six months after getting $10 billion from the Treasury, Goldman Sachs sold $5 billion of new shares with that in mind.

It is easy to see why. Some banks, including Goldman, say that back in October they had enough capital and took part in the bail-out only to show solidarity with the government's plan. Since then they have been excoriated by Congress and now face restrictions, mainly on pay but also on hiring foreigners, that Lloyd Blankfein, Goldman's boss, says "limit our ability to compete". Meanwhile banks' shares have soared on optimism about their profits. Goldman says that repayment is a "duty". But who wants to rely on livid voters and banker-bashing politicians when private cash is available?

The principles for letting a bank repay bail-out cash are clear. Its capital position must remain strong: capable of at least maintaining its lending book, absorbing shocks, and commanding enough confidence to allow borrowing without state guarantees. It should repay taxpayers by selling new shares or retaining profits. For a bank to boost capital by withdrawing credit or exiting important business lines would be counterproductive. It must have healthy profits and sane risk and pay policies. European banks, such as HSBC, that have got there without state support have rightly been applauded.

Does Goldman pass these tests too? Although it has just reported bumper earnings (see article), their quality was mixed, and relied too much on volatile trading. It has a slug of hard-to-value assets and its borrowing costs have yet to return to normal; it is still using the government's debt-guarantee scheme. But its regulatory capital ratios are solid, half as strong again as those of America's ten biggest banks overall. When the Treasury completes its stress tests to evaluate the largest banks soon, Goldman should pass with flying colours.

No bank is an island

Yet the crisis has shown that banks do not exist in isolation. Some say that by letting lenders repay the state, those unable to do so would face runs on their shares and junior debt. This cannot be made the sole consideration—the banking system should not walk at the pace of its weakest members. However there is still a danger that the American banking system as a whole is nearly insolvent. And if the stress tests are rigorous, they could show that insolvency is indeed some banks' likely fate: losses may well eat

up much of the system’s capital.

The slim margin for error means confidence could still evaporate, with even good banks dragged down by counterparty risk. The government says banks that fail the stress tests must raise capital within six months (from the state if necessary) and sell toxic assets. The tests must not be fudged. Providing that the six-month deadline is a firm one, forcing Goldman and others to retain their unwanted funds till then seems fair. But that is long enough. Meanwhile, the politicians should stop changing the rules about pay and bonuses.

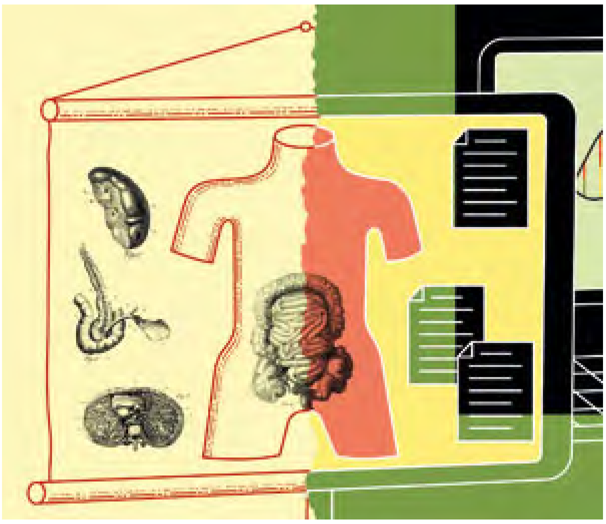
Technology and medicine

Fixing health care

Apr 16th 2009
From The Economist print edition

Technology has been a culprit behind runaway health costs. It might now help tame them

Illustration by Otto Steininger



AS THE developed world grows older and sicker and the developing world gets richer and fatter, demand for health care will only grow. Governments are already having to adjust. Barack Obama wants to bring 46m or so uninsured Americans into his country's patchy health system. China's leaders have just unveiled a $120 billion scheme to expand health insurance for the country's poor (see article). Several other developing countries have similar schemes.

The snag is the cost. The health systems of Western Europe, which already offer universal coverage, are struggling to cope with soaring costs. According to the Congressional Budget Office, Medicare and Medicaid, the American government schemes for the elderly and the indigent, will increase from 4% of GDP in 2007 to 12% in 2050—with three-quarters of the surge a result of cost inflation, as opposed to an ageing population.

A lot of those extra costs come from new technology—which is odd. In most other industries, new more productive technologies drive costs down: thus the word processor replaced the typewriter, and the fax (and then e-mail) replaced the telex. That does happen in medicine: new treatments for cardiovascular patients and for babies of low birth-weight have delivered benefits far outweighing their costs. But it does not happen nearly enough. Either the old kit stays in service (a fancy imaging machine rarely puts the old X-ray out of commission) or too much is paid for pointless "innovations": witness the money spent on the latest, only marginally superior "me too" pill, when cheaper generic versions exist.

The reasons for this vary from country to country, but two things pop up repeatedly: distorted payment systems (the doctor prescribing the pricey pill seldom pays for his inefficiency) and a lack of proper competition. Medical-device manufacturers often expect reimbursement for expensive new equipment on a "cost plus" basis, a practice rarely seen in competitive markets, and drugs companies enjoy temporary monopolies on new pills that may be no better than cheaper alternatives on the market today. This is an industry which has largely managed to escape even basic cost-benefit analysis.

Our special report this week argues that change may finally be under way. It is prompted, in part, by a host of information and communication technologies that should make health care much more portable, precise and personal. The spread of electronic medical records and the emergence of a "smart grid" for medicine (so doctors, and in some cases patients, can see what their peers are doing) should bring more transparency. "Intelligent pills" that come tailored to people's needs should be cheaper than the one-

drug-fits-all variety, especially if the doses do not have to rely on humans remembering when to take them. Personal medical monitors and other devices should make it easier to treat expensive chronic diseases that last for years, such as diabetes and heart defects, on a preventive basis. Your ticker can be monitored at home remotely rather than having to come in for check-ups, and problems can be spotted in advance, thus avoiding costly hospitalisations.

Change is also being prompted by the willingness of doctors and politicians, especially ones in poorer countries, to apply at least some economic tests to medical spending. One example is India (see article), where poor patients mostly have to pay for their own health care: its techniques and business models may yet be copied in the rich world. Another leader is Britain's National Institute for Health and Clinical Excellence (NICE), which has championed the use of basic economic appraisals, albeit in an over-centralised way. Mr Obama wants to expand comparative effectiveness studies and health technology assessments. These sound boring but could save billions, which is one reason so many health-care firms moan about them.

Power to the people

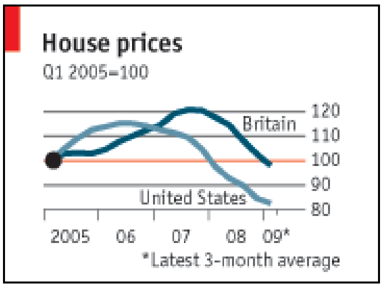
The arrival of digital medicine promises to shake the medical establishment to its roots, not least because it will hand so much more information over to patients themselves. But the biggest savings will not come through exotic pills or "patient empowerment", but from the application of basic economics. Realign the incentives in health care so that innovation focuses on making patients better and health care cheaper, Mr Obama, and you will be half way there.

Housing

Building castles of sand

Apr 16th 2009
From The Economist print edition

Governments spent a fortune encouraging people to buy houses. That was a mistake they now risk repeating



BANKERS, frauds, predatory insurers: there has been a stampede to punish the villains of the global meltdown. Yet one culprit is not only rarely seen as an offender, but is also being cosseted and protected. Governments' obsession about home ownership has contributed as much to the meltdown as any moustache-twirling financier.

The bust began in America's housing market and soon spread to government-sponsored institutions created to increase home ownership, Fannie Mae and Freddie Mac. Part of the problem came about because of policy. In most rich countries the state subsidises private housing. Some places (America, Ireland and Spain) give tax relief on mortgage-interest payments. Others, such as Britain, eliminate or lower the tax on capital gains from sales of someone's main house. Still others use state-backed outfits to direct credit to housing or to make it easier for first-time buyers or the poor to buy their own homes. Subsidies are not to blame for everything—the housing bubble affected a range of markets regardless of how much they were subsidised—but the distortions aggravated the boom and bust by making housing artificially attractive.

Governments subsidise home ownership because they think it encourages stable, more law-abiding neighbourhoods. The children of homeowners do better at school than the children of renters do. Homeowners are more engaged in local democracy. And, because homeowners must pay off their mortgages, housing supposedly encourages people to save more than they otherwise would.

Yet as our article argues, the benefits of subsidies have proved smaller than expected and the costs much greater. Home ownership may indeed instil neighbourly stability (though Germany with its high levels of stability and renting suggests the two need not go together). But who said local stability was so desirable? A stable neighbourhood may be one in which people refuse to move in search of jobs.

Government backing sucked money into housing, boosting prices. Since millions use their homes as collateral for general loans, the house-price boom also exaggerated the consumer boom while it lasted, and amplified the bust when that came. Perversely, public policy even undermined the very things governments were trying to encourage. Housing policy aims at boosting savings. Yet home-equity loans and "negative amortisation" mortgages boosted spending.

Battering-ram required

In their efforts to stem the financial crisis, governments have thrown money at everything, including housing. Some of this is justified, but they are making their ultimate task harder. The state should in the medium term be aiming to slash subsidies for housing. That means, in America, cutting the size of the loan on which people can deduct mortgage interest from $1m now to, say, $300,000 and ideally to zero. There is no argument for a tax break worth, in practice, ten times as much to the rich as to the poor. Countries should start phasing out the unlimited capital-gains tax advantages given to houses—which people treat partly as an investment. And any government weighing whether to create institutions to boost home-ownership should take note of the disasters elsewhere.

A homeowning democracy is a bulwark against an overmighty state. Yet all those subsidies produce not just bloated home ownership, but dependence on public handouts.

On General Electric, credit-default swaps, Germany, Afghanistan, co-operatives, crime, San Francisco, knees, politicians

Apr 16th 2009
From The Economist print edition

A conglomerate doing well

SIR – If General Electric is “losing its magic touch”, as the headline to your briefing (March 21st) proclaimed, it wouldn’t seem to be reflected in the company’s fundamental performance. Despite the economic slump, GE’s five-year average revenue growth rate has been 12% while the average earnings growth rate has been 7%, both in line with GE’s historic numbers. In 2008 GE outperformed its peers in organic revenue growth, margins, return on total capital and revenue per employee.

No doubt our stock and our earnings have been under pressure because of our presence in financial services, but on a day-to-day basis, GE’s performance continues to be strong relative to the market.

Gary Sheffer
Executive director
Communications and public affairs
GE
Fairfield, Connecticut

Giving credit where its due

SIR – Professor Eric De Keuleneer’s letter on the pitfalls of credit-default swaps (CDS) is fairly representative of the academic community’s thinking on the matter (Letters, April 4th). Actually, the market in CDS for the companies listed on the main American and European stockmarkets is very liquid, with narrow spreads on bid offers and dealing sizes of a minimum of $10m upwards in most cases. It would be very difficult, if not impossible, for individual participants to “manipulate” such a large market by themselves.

The CDS market is a transparent indicator of credit risk, and is not “opaque”. We can easily judge this by observing “the basis”, that is the differential between the CDS price and the cash-market bond price. Investors may compare the two prices. A low basis would imply that both prices represent fair value. A wide basis indicates mispricing in one or both markets and is a helpful measure of relative value. Prices do not, therefore, rise “in a void”. CDS prices do not exist in a vacuum from the cash-market price, and the basis will demonstrate any unrepresentative price. If the cash-market yield is also rising, it demonstrates that the market is placing a higher premium for that particular risk.

To suggest that the CDS market is illiquid or open to manipulation is to misunderstand the symbiotic relationship between cash and synthetic markets in credit, which operate in exactly the same way and with the same benefits to investors as the cash and synthetic markets in interest-rate products. CDS represent the pure price of credit, and the instrument is often more liquid than the cash price for the same name. If it was “forbidden altogether”, investors would find that liquidity and transparency had been reduced, rather than improved.

Moorad Choudhry
Head of treasury
Europe Arab Bank
Professor of economics
London Metropolitan University
London

German history

SIR – Your article about Germany's Constitutional Court got some history wrong ("Judgment days", March 28th). The "principality of Baden" (a Grand Duchy, to be precise) ceased to exist in 1918, and therefore was not merged with three other states to form Baden-Württemberg in 1951. The three states in question were Allied occupation-era entities created from the historical states of Baden, Württemberg and Hohenzollern-Sigmaringen.

You then mentioned that the proportionality principle was invented in Prussia in the 18th century "to limit the Kaiser's power". The 18th-century rulers being referred to were kings of Prussia and electors of Brandenburg, but didn't hold the title of Kaiser until 1871. The only "Kaisers" as such at the time were the Habsburg monarchs in Vienna.

Mark Largess
Somerville, Massachusetts

The following letter, on Afghanistan, appears online only

What's being done in Afghanistan?

SIR – You can't move in media debate these days without tripping over two magic words that will solve all the international community's problems in Afghanistan ("Say you're staying, Mr President", March 28th). The term "exit strategy" is now vying with "comprehensive approach" and "failure is not an option" in my top-ten list of glib oversimplifications to make us believe something clever is probably being done. In Afghanistan it looks like nothing other than a face-saving buzzword to cover the acknowledgment of failure.

I am trying to understand what an exit strategy would actually look like and what would be left behind. Might the Afghan population feel slightly betrayed, particularly if a deal is struck with the Taliban? Perhaps the Swat Valley in Pakistan is where we need to look for an example of what Afghanistan may become.

Tim Foxley
Stockholm

Business incentives

SIR – More people may well take an interest in co-operative business models during hard economic times ("All in this together", March 28th). During economic downturns employee-owned companies, in Britain at least, tend to make a higher return on capital than companies listed on the stockmarket. But they also make above-average returns during good times. Employee-owned companies create a greater spirit of internal competition, vigilance and camaraderie, leading to long-term innovation, cost-cutting and a happier workforce. In effect, internal competition within employee-owned companies is projected outward against their competitors, which can only be of benefit to customers.

In Britain, this philosophy is epitomised by the John Lewis Partnership. The retailer's 60,000 employees turned down the opportunity of a stockmarket listing, and possible large individual windfalls, in 1999. In 2009 it pledged to create a further 5,000 jobs, counter to trends among most, if not all, public retailers.

James Goodwin
Maastricht, the Netherlands

Witness for the prosecution

SIR – There was an important factor missing in your explanation of why prosecuting white-collar crime is more difficult in Canada than in the United States ("Too trusting", April 4th). In the United States public lawyers start an investigation before charges are laid in white-collar cases. A good example is Patrick Fitzgerald, the United States' attorney who investigated Conrad Black. Lawyers are able to gather and assess evidence in these matters much better than the police. In Canada the police are responsible for gathering evidence in an investigation, and are often ill-equipped and unskilled in such cases. Crown attorneys only become closely involved once the prosecution begins.

Mark Collins
Ottawa

City traveller

SIR – I'm afraid your description of Gavin Newsom's having "tidied up the city somewhat and cut the number of rough sleepers" since becoming mayor of San Francisco could not be further from the truth ("Young man in a hurry", March 21st). Since his election the city has become noticeably dirtier and the homeless have moved into neighbourhoods, where they camp openly and harass people. Driving the streets in a small car has become a teeth-shattering experience as the roads have crumbled from neglect.

Mark Fredenburg
San Francisco

By a leg

SIR – I was surprised that age was not a determining factor in the biometric algorithm identifying people by their knees ("Knobbly ID", April 4th). With a lamentable matching rate of 34%, perhaps the researchers could learn something from Hercule Poirot. In Agatha Christie's "Cat Among the Pigeons", Poirot solves a case using his insight that "the knees of a woman of 24 or 25 can never be mistaken for those belonging to a young girl of 14 or 15".

Tim Deyzel
Sydney

All that hot air

SIR – You described the contribution to greenhouse gases being produced by the power plant that heats Congress ("Cap and binge", March 14th). Did you also consider how much wasted carbon dioxide is exhaled into the precious atmosphere every time one of our elected officials stands in front of a news camera?

Andrew Leber
Newmarket, New Hampshire

South Africa's elections

Voting for the people's man

Apr 16th 2009 | JOHANNESBURG
From The Economist print edition

Jacob Zuma is bound to be South Africa's next president. But what sort of country will he make it?

AP

THE outcome is not in doubt. But the elections that will be held on April 22nd will still be the most important since South Africa's first fully democratic ballot in 1994. The African National Congress (ANC) will win by a landslide, as it has always done over the past 15 years. The new parliament will then elect the country's president, now certain to be the ANC's leader, Jacob Zuma. But what will happen afterwards? Will Africa's biggest economy continue along the path to a stable multi-party democracy? Or will it sink into despotism, as so many other African countries did after liberation?

South Africans may well consider that outcome impossible. Democratic institutions are robust. Elections are free. As a member of the G20, South Africa hobnobs with the richest and most powerful countries in the world. Its post-apartheid constitution is among the most progressive. Its judiciary is impressively independent, its press unfettered, its civil society vibrant. Many Africans are nevertheless deeply worried about what might happen to the country under a President Zuma and an all-powerful, perhaps even vengeful, ANC.

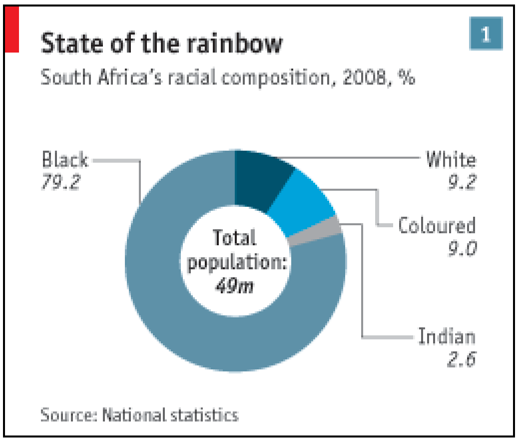
The heady ideals of Nelson Mandela's "rainbow nation" were bound to give way to greater realism. But it has gone beyond that. Many now share the "disillusionment, resentment and rage tinged with despair", of which André Brink, an Afrikaans author and former anti-apartheid campaigner, writes in his recent memoir. Since the ANC first came to power in 1994 an estimated 800,000 whites have left the country, taking their skills with them; 4.5m, representing 9% of the population, remain. Crime has certainly played a part: though figures are hard to compare, South Africa has one of the world's highest murder rates. But the dominance of the ANC has also been a powerful factor.

Whites are not alone in their pessimism. "We are in a bad place at the moment in this country," laments Archbishop Desmond Tutu, a liberation hero turned government scourge. After the nation had thrown off the shackles of injustice and oppression, he had hoped to see a new age of freedom and justice for all. But "we have let down our guard and quickly forgotten the struggles of our past…Please allow us old people to go to the grave smiling, not with our hearts broken."

The manner in which Mr Zuma's eight-year tussle with the courts was brought to an end has shocked

South Africans. On April 6th the supposedly independent National Prosecution Authority (NPA) announced that it was withdrawing all charges of corruption, racketeering, tax-evasion, money-laundering and fraud against the ANC leader. The actual merits of the case were not in question, it said. Nor was the prosecution in any way flawed. The issue was the (alleged) manipulation of the timing of the announcement of the charges in an apparent attempt to thwart Mr Zuma's political ambitions. This made it "neither possible nor desirable" to continue with the prosecution.

Yet the grounds for dropping the case were puzzling. The charges against Mr Zuma had been serious. He was accused of accepting more than 4m rand ($596,000) between 1995 and 2005 from his friend and former financial adviser, Schabir Shaik, in exchange for using his influence to help secure government contracts for Mr Shaik's companies. Sentencing Mr Shaik to 15 years imprisonment in 2005, the presiding judge said that the payments to Mr Zuma "can only have generated a sense of obligation in the recipient". President Thabo Mbeki promptly sacked him as his deputy. A few days later Mr Zuma was indicted in his turn. He has always denied the charges.



Both Mr Zuma and Mr Shaik claim that the money was intended as a loan, part of which Mr Zuma says he has now repaid, though he does not say how much. Now that the charges have been dropped, he says he feels vindicated; but he has not been acquitted. A cloud of suspicion still hangs over him. He has never properly explained his relationship with Mr Shaik. It did not help when, last month, he announced that if elected he would consider granting a pardon to his friend. Three days later Mr Shaik, suffering from hypertension and depression, was released from jail on "medical parole", normally reserved for the dying. He had served two years and four months of his 15-year sentence.

The rise of the goatherd

Born of Zulu peasant stock, Mr Zuma herded his grandfather's goats rather than going to school. He joined the ANC in his mid-teens. From then until he was almost 50 he devoted his life to the liberation struggle, first as a prisoner on Robben Island (with Nelson Mandela), then as an activist in the armed underground, and finally as the ANC's head of intelligence. He never had to worry about money; the party took care of that.

But on his return from exile at the end of apartheid in 1990, he found himself with no settled home, no solid job and no money. It would not surprise South Africans if, like many others who had sacrificed their lives to the cause while others at home grew rich, he felt he was owed something.

Financial wrongdoing within the ANC's ranks is widespread and tolerated, though many have been prosecuted. A poll taken shortly before Mr Zuma's charges were dropped showed that just half of ANC members believed him to be innocent. Yet nearly three-quarters continued to support him "wholeheartedly".

From 1994 until 1999 Mr Zuma served as the local minister for economic affairs and tourism in his native KwaZulu-Natal. But his pay was meagre, his lifestyle lavish and he already had three wives and numerous children to support. At one point he thought he might throw it all in. But Mr Shaik and his brothers, who had worked alongside him in the underground, persuaded him not to, arguing that the country needed leaders like him. For ten years Mr Shaik picked up Mr Zuma's tab for virtually everything, from his luxury homes and expensive cars to his traffic fines and children's schooling. All this is well documented. In African culture there is a sense of obligation to help relatives and friends in times of need. Mr Shaik's level of care, though, appears to have gone beyond the call of duty.

Mr Zuma insists that there was never any case against him. Nevertheless, after the dismissal of the charges, he strove to sound presidential. Now was not the time for vengeance, he told reporters: "We have a country to run, not individuals to chase." His allies take a different view. They are baying for blood, accusing Mr Mbeki—whom Mr Zuma's allies in the ANC ousted as party and then as national president—of being behind a plot to bring down Mr Zuma. At a "victory" rally on April 7th Zwelinzima Vavi, leader of Cosatu, South Africa's biggest trade-union federation and one of the ANC's partners in the ruling tripartite alliance with the Communists, demanded that "Number One, that big man…must answer in court."

This is typical of Mr Zuma's tactics: he lets others do the dirty work for him. One of his most-feted "bully boys" is Julius Malema, leader of the ANC's powerful Youth League. Decried by his detractors as an arrogant dimwit but lauded by his comrades as a sharp and gifted speaker, the chubby-cheeked 28-year-old delights in provocation. The woman who accused Mr Zuma of rape in 2005 must have had a "nice time", he suggested, otherwise she wouldn't have stayed for breakfast. Helen Zille, the feisty (white) leader of the Democratic Alliance (DA) and a former anti-apartheid campaigner, was a "racist" and "colonialist". The Congress of the People (COPE), a new party set up by ANC rebels after Mr Mbeki's undignified ouster last September and now the ANC's first serious black-led challenger, was nothing but a "Western puppet".

Occasionally Mr Malema is deemed to have taken a step too far, as when he declared last summer that the Youth League was "prepared to take up arms and kill for Zuma" if his prosecution went ahead. The public uproar was such that the ANC felt obliged to rap him over the knuckles. But otherwise he is almost never reined in, leading to the assumption that the ANC top brass, including Mr Zuma, do not altogether disapprove.

Dressed in natty designer suits and matching silk ties, the beaming Mr Zuma, seeks to reassure his white audiences, gathered in air-conditioned five-star hotels, with his down-to-earth wit and technocratic (often rather boring) speeches. But dressed in a bright-yellow ANC T-shirt and shades, belting out his "Umshini Wami" ("Bring me my machinegun") theme song to his adoring black supporters in sweltering sports stadiums, he is a different man. Then he makes blunter, more sinister remarks, as when he called on potential defectors to COPE to think again. "It is cold out there if you are out of the ANC," he warned them. "Very cold."

The positive side

After 15 years of uninterrupted, virtually unchallenged power, the ANC has evidently succumbed to many of the vices of one-party states: arrogance, nepotism, corruption, intimidation. Hardly a day seems to go by without some new scandal. Yet it has notched up some remarkable achievements, starting with the bloodless transition from white minority rule to full multiracial democracy. The ANC government has set up Africa's only broad-based welfare state, providing cash benefits to 12.5m people compared with just 3m in 1996. To help get people out of the sprawling, squalid shanty towns it has built 2.7m low-cost homes, housing around 10m people. Some 80% of all households are now connected to electricity and clean water—up by a third since 1996. More than half of state schools no longer charge fees. Free health clinics are gradually being set up. After years of shameful denial of any link between the HIV virus and AIDS, some 60% of the 5.7m infected are at last receiving antiretrovirals. Violent crime may still be appallingly high, but it has been falling in almost all categories.

At the same time, a new black middle class has sprung up. An estimated 2.6m of South Africa's 39m blacks (about 80% of the total population) now earn at least 6,000 rand a month, with many earning a lot more. That may not seem much by Western standards, but it is more than what nearly half of their compatriots earn in a year. These new rich go out to restaurants, drive cars and buy the latest fashions in air-conditioned malls. Most of the wealth, though, is still in the hands of whites—not so much because of discrimination, but because they have higher skills. Although absolute levels of poverty have dipped, the gulf between rich and poor is still widening. South Africa is now one of the most unequal countries in the world.

This has changed voting patterns. For the first time, South Africans will probably vote along socioeconomic lines as much as racial ones. Of the ANC's supporters, the vast majority are black (96%), poor and little educated. The DA has an exactly opposite profile: predominantly white (around 64%), with a good sprinkling of Indians and coloureds (mixed-race), but almost no blacks. Its supporters are also older, richer and much better educated.

COPE fits neatly between these extremes. Its supporters are multiracial (about 60% black and 18% white), middle class, relatively well educated and well balanced across all age groups. Like the DA, the new party, with a bishop as its presidential candidate, likes to present itself as morally upright, with a commitment to rooting out corruption and upholding the constitution. But its image has been tarnished of

late by the alleged link between a number of its main backers and the “conspiracy” against Mr Zuma.

South African elections are based on strict proportional representation. In the last national poll, in 2004, the ANC won a record 70% of the vote; the DA came second with 12.4%. This time the situation is more complex. About 3m more people have registered to vote and, with the buzz surrounding the emergence of COPE, turnout is also expected to be higher. This, combined with an unusually large number of undecided voters, makes it difficult to predict the results. Most pollsters are suggesting that the overall ANC vote will fall only slightly, to 61-64%, that the DA will get 11-16%, and that COPE will come a close third with a commendable 9-15%.

Because of Mr Zuma’s closeness to Cosatu and the Communists, some predict that he may preside over a radical shift to the left. But this seems unlikely, not least because some of his staunchest allies include wealthy black capitalists, who would resist such a move. Like many liberation fighters, Mr Zuma was once a member of the SACP, but quit in 1990 and went on to give his full backing to Mr Mbeki’s market-friendly economics. Although he has big plans to extend the welfare state, he also thinks it important to attract foreign investors. The high (fourth) place given to Trevor Manuel, South Africa’s highly regarded finance minister, on the ANC’s list of parliamentary candidates suggests he may want to keep Mr Manuel on in the post he has occupied since 1996.

Mr Zuma remains an enigma. When asked about his intentions when he comes to power, he simply says the ANC’s policies are his too—abroad, apparently, as well as at home. Asked for his reaction to the government’s “quiet diplomacy” on Zimbabwe and its backing for Sudan’s president, Omar al-Bashir, in his struggle with the International Criminal Court, Mr Zuma merely said that his approach would be the same as his predecessors’.

Recession’s shadow

With South Africa sinking into its first recession after 16 years of expansion, the challenges facing the next president are daunting. Business confidence is at a ten-year low. After growth averaging around 5% a year between 2004 and 2007, the economy is expected to contract by around 0.8% this year. Mining and manufacturing have been in free fall for six months. Exports and retail trade are following suit. Despite the boost given to the economy by preparations for next year’s football World Cup, which South Africa is hosting, and a government stimulus package of 690 billion rand over the next three years, the downturn will cut jobs and increase poverty. Only those who have held a “formal” job for at least four years may claim unemployment benefit. But, for the moment, voters seem to blame the global downturn rather than the government.

Will Mr Zuma be up to the job? Whites, in particular, are alarmed by his lack of formal education; his flamboyant polygamy (he recently married his sixth wife, 30 years his junior); his irresponsible attitude toward HIV/AIDS, as revealed at his rape trial; and his hidden years with the ANC underground, particularly as head of intelligence. In its 1998 report, the Truth and Reconciliation Commission accused the ANC in the 1970s and 1980s of “gross violations of human rights” and of “routine [use of] torture to extract information”.

AFP

A puzzling future for him, too

Then there are those worrying stray comments. He wants to review the status of the Constitutional Court (which has several times found against him), “because I don’t think we should have people who are almost like God in a democracy.” He loathes the press, which has certainly not been kind, slamming a “vicious media campaign designed to find me guilty in the court of public opinion”. His talk of rooting out the “lazy, corrupt and incompetent” from government sometimes suggests a purge of those he dislikes.

But Mr Zuma is as adored as much as he is loathed. After the heroic, aristocratic Mr Mandela and the aloof, technocratic Mr Mbeki, most South Africans seem to welcome the prospect of having a man of the people as their president. Mr Zuma is a good listener and a skilled conciliator. He works hard, and has impressive energy for a man just turned 67. He can exude great charm when he wants to.

Will he make a good president? That is hard to tell. It could go either way. The hope is that South Africa will continue along its current path of democratic progress and growing prosperity. But Mr Tutu will have to wait a little longer before being certain whether he can go to his grave smiling, or with a broken heart.

Immigration reform

All together now

Apr 16th 2009 | AUSTIN, CHICAGO AND NEW YORK
From The Economist print edition

Could this be the year for immigration reform?

AFP

AMERICA receives more immigrants than any other country. But its system for dealing with them is a model of dysfunctionality, with 11.9m illegally present in 2008, up 42% since 2000. Past efforts at reform have failed dismally. In 2006 protesters filled city streets after the House of Representatives passed a bill making illegal immigration a felony; but the proposal failed to pass muster in the Senate. The Senate's own effort in 2007 fared even worse. Police clashed with a crowd in Los Angeles. Opponents of reform barraged senators with so many calls that their phone system crashed. The Senate's bill, designed to please all sides, ended up pleasing no one.

Now Washington may try again. With a wretched economy and long to-do list, it hardly seems an opportune moment. Yet on April 14th America's two biggest unions, including one that helped block reform in 2007, unveiled a plan to push it forward. Luis Gutierrez, a congressman from Chicago, has visited 17 cities to build momentum for reform. A coalition of advocacy groups is planning an $18m campaign to make immigration a priority. Several big cities will hold rallies on May 1st.

The White House says only that Barack Obama will begin a debate later this year, but many reformers are giddy. "We expect something in May," Mr Gutierrez says hopefully. As *The Economist* went to press on April 16th Mr Obama was due to arrive in Mexico, where the issue would undoubtedly surface once more. The day before, he had named Alan Bersin as America's first-ever "border tsar".

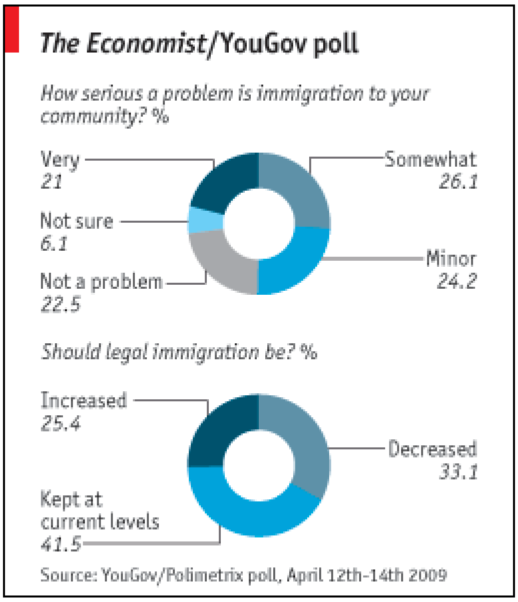
Advocates contend that bringing immigrants' shadow economy into the light will fatten tax rolls, end the abuse of illegal workers, improve wages for all and spur economic growth. Though the details remain controversial, the outline for a sensible system is clear: a more tightly controlled border; a path towards legalising existing immigrants; a system for verifying the status of workers and punishing employers who flout the rules; and a better way to admit temporary workers in future.

Historically, however, downturns have prompted Americans to shun foreigners, not welcome them. Competition for jobs is rising with unemployment. Conservatives and populists remain combustible. CNN's Lou Dobbs has fumed about an "amnesty call" from Washington. Lamar Smith, the senior

Republican on the House Judiciary Committee, has declared: “No nation should force its citizens and legal workers to compete with illegal immigrants.”

Nevertheless this year’s attempt has at least a chance of success. The federal raid of a meatpacking plant in Iowa in 2008 exposed the worst side of America’s system, charging immigrants as serious criminals, separating families and upending a town. The Mexican side of the border has continued its descent into chaos. Patterns of settlement have shifted, leaving states such as Georgia and South Carolina to grapple with unexpected burgeoning immigrant populations. Neighbourhoods far from the border, including some suburbs of Washington, DC, have been transformed by immigrants. These changes have given the debate over immigration a new national context, says Audrey Singer of the Brookings Institution, a think-tank. Without guidance from the federal government, last year the states passed 206 laws and resolutions related to immigration, says the National Conference on State Legislatures.

The political winds have also shifted. In 2004 Latinos supported John Kerry by 53% to 44%. In November they sided with Mr Obama 67% to 31%, helping him win important states such as Florida, New Mexico and Colorado. One study found that in 20 of 22 competitive congressional races, candidates favouring broad reform defeated hardliners. Before 2008, says Frank Sharry of America’s Voice, which did the study, “everyone from Rahm Emanuel to Republican operatives thought that illegal immigration was one of those issues that helped Republicans.” In 2008 immigration helped mobilise Latino voters for Democrats. Among the general electorate, it was the incendiary issue that failed to incense. Our YouGov poll (see chart) shows opinion fairly evenly divided.



Just as important is labour’s apparent change from hindrance to help. In 2007 the AFL-CIO, which represents 10m workers, argued that plans to allow illegal immigrants to remain as guest workers would depress wages for their members. On April 14th the AFL-CIO and Change to Win, a coalition of seven unions representing 6m more, argued that reform would help American workers in the long run. The announcement should win some blue-collar Democrats to the reformers’ cause.

While healing one split, the new alliance may reinforce another—with business. The AFL-CIO and Change to Win want a new commission to align immigration more closely with the needs of the labour market. Congress now caps visas for foreign workers, a clunky system that does not match supply too precisely with demand. Business has long bemoaned the limits on skilled immigrants in particular, who have founded 52% of Silicon Valley start-ups according to the Kauffman Foundation, a Missouri-based think-tank. A new commission might move more nimbly than Congress. But business groups fear it could be just as political.

When Mr Obama may dip his toe in these choppy waters, let alone dive in, remains unclear. “The president has consistently said that he wants to start the discussion later this year,” says Nick Shapiro, a spokesman for the White House. “But the economy comes first.”

Earthquakes

State of fear

Apr 16th 2009 | MENLO PARK, CALIFORNIA
From The Economist print edition

Italy's earthquake reverberates on America's fault-lined coast

EASELS holding seismic maps of Italy are standing all around the western headquarters of the United States Geological Survey in Menlo Park, California. Given that Californians live in permanent fear of "the big one", they feel "lots of scientific and emotional connections" to Italy's recent earthquake, which killed 294 people and destroyed ancient towns, says Ross Stein, a scientist there.

America's entire western coast sits on or near tectonic faults. Since these forces formed the coast's harbours, and since people have settled largely around those harbours, the populations tend to be where the risks are highest.

In California, which has about 1,500 known faults, two are particularly menacing. One is the southern San Andreas, where the Pacific plate shears north-west along the North American plate, and where a "swarm" of tremors under a desert lake near the Mexican border has recently caused worry about a bigger quake being triggered near Los Angeles.

The other is the Hayward fault that cuts through Oakland, Berkeley and the rest of the Bay Area east of San Francisco. It has ruptured on average every 140 years for the past 700 years; the last big one was just over 140 years ago. Depending on the time of day, location and depth of a quake, Mary Lou Zoback, an earthquake specialist at Risk Management Solutions, a firm that produces loss scenarios for insurance companies, reckons that a magnitude 7.05 rupture in the Hayward fault could kill 4,500, injure 50,000, leave hundreds of thousands homeless and cause $250 billion in economic loss, most of it uninsured.

Oregon, Washington and British Columbia might worry too. Their region, called Cascadia, is the result of another plate, the Juan de Fuca, shoving underneath the North American. These faults produce big ones about every 500 years, less frequently than California's. But when they do, the shaking is otherworldly. The last giant, in 1700, was of magnitude nine, which has the energy of about 31 eights, 1,000 sevens, or 30,000 sixes. (This month's quake in Italy measured 6.3.)

The best way to prepare is to build safer structures, says Jeanne Perkins, who advises local governments in the San Francisco Bay Area. One difference between California and Italy, she says, is that its cities and buildings are younger. Building codes have progressed with each quake, taking big leaps after tremors in 1971, 1989 and 1994. They also seem to be enforced.

Brick buildings have been the deadliest in the past, and are now rare in California, though still common in Oregon and Washington. Wooden houses fare relatively well because they are flexible and light. Office buildings used to be dangerous, but many have now been retrofitted.

The biggest worry, says Ms Perkins, is so-called "soft-storey" residential blocks that predate the recent building codes. These are buildings that have parking garages, restaurants or shops on their ground floors, with few load-bearing walls holding up the flats above. She estimates that about 2,800 residential blocks in San Francisco have soft storeys, and about 1,500 in Oakland. Often these contain rent-controlled flats, raising fears that the poor would be more likely to die.

Mr Stein in Menlo Park urges perspective. He has spent $5,000 retrofitting his own house, keeps his survival kit up to date and has clipped whistles on his and his daughters' key chains ("the best thing if

you’re trapped”). But he enjoys life on the sun-kissed coast. Besides, he winks, “my cappuccino machine is on a separate, uninterruptible, power supply.”

The ex-president

Back in the saddle

Apr 16th 2009 | AUSTIN
From The Economist print edition

George Bush edges back into public life

WHEN George Bush left the presidency on January 20th, many Americans were keen to turn the page. They have warmly welcomed a new cast of characters, from Barack and Michelle down to Bo the Portuguese water dog. But some members of the Bush crew are much in the news. Karl Rove, an influential adviser, is penning weekly editorials and has been scrapping with Joe Biden, the vice-president. The former veep, Dick Cheney, has been on television growling about Mr Obama's approach to national security. In Spain a court is deciding whether Alberto Gonzales, the former attorney-general, and five other administration officials can be indicted for torture.

Mr Bush himself has mostly kept a low profile since returning to Texas. He and Laura settled into their new house, in a select part of Dallas. He threw the first ball at a Texas Rangers baseball game and visited a hardware shop. He has been jogging and riding his bicycle. He has given one speech, in Canada, at which he declined to criticise the new president. "He deserves my silence," said Mr Bush.

But Mr Bush will not be silent for ever. He has started to write his memoirs, which will skip the usual format and be organised around a series of 12 momentous decisions. The format makes sense, given Mr Bush's view of history and his role in it. "I'm the decider," he said in 2006, defending his decision to keep Donald Rumsfeld as defence secretary. It was one of his least popular decisions (Mr Rumsfeld went some months later), and Mr Bush's many critics thought it was a bull-headed thing to say. But perhaps it was simply an existential comment. The president is the decider. There is no getting round that.

The "decider" idea will extend to the George W. Bush Presidential Centre, to be housed at Southern Methodist University in Dallas. The centre will include a policy institute as well as the usual library and museum. On April 14th Mr Bush gathered about 20 of his old employees in Dallas, including the former secretary of state, Condoleezza Rice, and a former speechwriter, Michael Gerson, to hash out strategy.

The policy institute will be unashamedly ideological. The museum, like the memoirs, will be organised around a series of decisions. The list has not been finalised, though some are obvious choices, such as the decisions to invade Iraq and Afghanistan. Mark Langdale, president of the George W. Bush Foundation, thinks that Mr Bush's 2007 decision to pursue immigration reform should make the cut. The effort failed in the Senate, but failure is part of any human story. That goes for presidents, too. "Sometimes they succeed, and sometimes they don't, but the journey continues," says Mr Langdale.

Uranium mining

In Virginia's glowing hills

Apr 16th 2009 | RICHMOND
From The Economist print edition

Plenty of uranium lies in the Piedmont. That's where many think it should stay

THIRTY years after America's worst atomic accident at the Three Mile Island plant in Pennsylvania, and 330 miles (530km) away in the rural Piedmont region of Virginia, a retired army officer-turned-diplomat wants to kick-start the country's nuclear industry—in his own front yard.

Walter Coles and his son (also Walter), backed with $25m from a clutch of unidentified local investors, Canadian energy firms, hedge funds and equity shops, propose to mine the largest untapped lode of uranium in the United States. The problem is a Virginia law, largely the handiwork of environmentalists and some of the Coles' frightened neighbours, which prohibits uranium mining anywhere in the state.

Bands of the radioactive ore stretch north-south along Virginia's rolling hills. An estimated 119m pounds (54m kg) lies beneath farm and timber land that has been the Coles' family seat since the 1700s. Even with spot prices down to $40 a pound, from $136 in June 2007, the uranium is worth billions.

Profit is one inducement; so are friendly murmurings from the Obama White House about expanded nuclear power. By May the Department of Energy is expected to announce $18.5 billion in loan guarantees for two or three new reactors.

The Virginia uranium that might power those plants and America's 104 existing civilian reactors is off-limits because of a ban enacted by the state in 1982. That was the last time a mine and mill was proposed for Pittsylvania County (named after William Pitt the Elder), a vast former tobacco-and-textile area above the Virginia-North Carolina border. The Coles, father and son, are campaigning to have the moratorium lifted. At least $7,000 has been contributed to state lawmakers, and more could flow in Virginia's approaching elections. Five lobbying firms are busily at work, and an online effort to enlist support is under way.

The mine—an idea that is at least five years from becoming reality, says the elder Mr Coles—could generate 300-500 jobs in a region where unemployment is high. Danville, the area's biggest city, had a jobless rate in January of 16.8%. Opponents retort that the latest figures from the Energy Information Administration (EIA) show that only 500 people are employed in uranium mining and milling nationwide.

A uranium mine, coupled with proposed oil and gas wells 50 miles (80km) off the state's Atlantic coast, could put Virginia—already second to California as an importer of electricity, according to the EIA—in the energy-exporting business. Besides, a boost in domestic production would make America less dependent on dodgy foreign suppliers such as Russia and Kazakhstan. In 2007 Russia alone provided 33% of the uranium consumed by America.

For the mine's opponents, however, the stakes are too high. They dismiss the claim that new technology allows the ore to be extracted with little harm to the environment. And approximately 200 miles east of Pittsylvania County the cities of Virginia Beach and Chesapeake, with a combined population approaching 700,000, fear that run-off from a mine could poison their water supply. Suddenly, the fight over uranium mining is no longer just between the Coles and their neighbours.

Moonshine

Lightning strikes

Apr 16th 2009 | FRANKLIN COUNTY, VIRGINIA
From The Economist print edition

An ancient tradition is alive and reeling

DEEP in the mountains of rural south-western Virginia, entrepreneurship has often come in the form of strong moonshine whiskey, produced in backwoods stills and sold in glass jars and plastic jugs. This has earned Franklin County recognition as the moonshine capital of the world, though adjacent counties are equally productive.

"I only keep this here for guests," says a scruffy local as he slides a half-full jar of clear "white lightning" across the table. Even a sip is not for the fainthearted. Larger batches can double as an effective cleaning agent.

Moonshine can be distilled from different grains, though corn (maize) is the most common, and to varying levels of alcoholic potency. It is then often flavoured with local fruit. But despite the myriad variations, one common trait is that it is almost always sold tax-free and therefore illegally. Resistance to the whiskey tax dates back centuries. To pay off debts incurred during the war of independence, the infant American government tried to tax frontier distillers. That sparked the 1794 Whiskey Rebellion, which was put down by troops commanded by President Washington.

Nowadays moonshiners prefer tax evasion to insurrection to protect their trade. Cheaply made in 800-gallon stills, most of it is smuggled to poor inner cities and sold at half the price of its legal counterparts, avoiding state and federal taxes which run at roughly $25 per gallon (3.8 litres) of whiskey. Virginia estimates that it loses $20m in annual revenue. And the poor lose their cares—for a while.

North Carolina

Pipettes at the ready

Apr 16th 2009 | RALEIGH
From The Economist print edition

The state helps engineer a biotech boom

DURING a laboratory session at North Carolina State University in Raleigh, a dozen students gathered around a chromatography column. They were sending clarified lysate through an anion exchange, and some compared notes on the peculiar chemical smell of the classroom. “It’s like bad chicken noodle soup,” said one, wrinkling her nose.

Others explained how they had ended up in the protective goggles and booties. Wrennie Edwards said that she had started her career in textiles, but now she was “transitioning” to a livelier field. Megan Crum explained that, growing up in Greensboro, she always wanted to be a vet. But once she got to university she realised that everyone wanted to be one. There were, she thought, more opportunities in biomanufacturing. Her father, who used to work in tobacco, was enthusiastic.

Thirty years ago manufacturing in North Carolina meant textiles and furniture, and neither was doing well. The loss of those traditional industries was a blow. But North Carolina is finding a new course. The state has invested more than $1.2 billion in biotechnology in the past ten years, between facilities, research, training programmes and incentives for companies. Those efforts have paid off. North Carolina now has more than 54,000 people working for some 500 biotech companies. It is considered the third-largest biotechnology centre in the country, after California and Massachusetts. The aggregate economic impact, according to one report, is almost $46 billion a year.

It is no wonder that biotechnology companies like North Carolina. It has a high-powered university zone in the triangle formed by Raleigh, Durham and Chapel Hill, home to North Carolina State, Duke University and the University of North Carolina respectively. This has helped attract over 170 companies to Research Triangle Park, right in the middle of things. And the state has reached out to industry. North Carolina’s community-college system runs courses that prepare students for entry-level technician jobs. It also offers short courses in specific skills, such as micropipetting.

North Carolina State’s Biomanufacturing Training and Education Centre, where the students were working with the chromatography column, is a more elaborate example of college-state-industry interaction. The gleaming building was paid for with $38m from the state’s 1998 settlement with tobacco companies. Operating costs are covered by the state, to the tune of $7m a year. “We look at ourselves, and I think the state does too, as an economic-development tool,” says Rick Lawless, the associate director of the centre. Biotech has its struggles at the moment; companies are worried about investment in the current climate. But North Carolina’s love affair with its new industry will survive.

Musical diplomacy

Perfect pitch

Apr 16th 2009 | NEW YORK
From The Economist print edition

An encore for the jazz ambassadors

IN 1956, when the cold war was at its peak, America deployed a "secret sonic weapon", as a newspaper headline put it at the time. That weapon was Dizzy Gillespie, a famed jazz musician, who was given the task of changing the world's view of American culture through rhythm and syncopation. Crowds poured into the street to dance. Cultural diplomacy died down after the cold war ended. But the attacks of September 11th 2001 convinced the State Department to send out America's musicians once again to woo hearts and minds with melody.

Rhythm Road, a programme run by the State Department and a non-profit organisation, Jazz at Lincoln Centre, has made informal diplomats out of both musicians and audiences. Since it began in 2005, musicians have travelled to 96 countries. One band went to Mauritania after last year's coup; many depart for countries that have strained relationships with America. The musicians travel to places where some people have never seen an American.

Jazz, so participants in the programme attest, is well-suited to diplomacy. It is collaborative, allowing individuals both to harmonise and play solo—much like a democracy, says Ari Roland, who plays bass for a band that left New York to tour the Middle East on March 31st. Jazz is also a reminder of music's power. It helped break down racial barriers, as enthusiasts of all colours gathered to listen to jazz when segregation was still the law of the land.

The State Department spent $10m on cultural diplomacy programmes in the year to September 30th 2008. But most expect funding for the initiative to increase under Barack Obama, who pledged his support for cultural diplomacy during his campaign. Rhythm Road now sends out hip-hop and bluegrass bands as well.

There are some dissenters. Nick Cull, the director of the Public Diplomacy Programme at the University of Southern California, thinks that these diplomatic projects would be more productive if they were not administered by the same agency that oversees the country's foreign-policy agenda. And there is also clamour for Mr Obama to appoint a secretary of culture in his cabinet. What good, they ask, is sending American culture abroad, when the country is not giving it proper attention at home?

Statewatch: Iowa

It's all relative

Apr 16th 2009 | DES MOINES
From The Economist print edition

Despite a faltering ethanol industry, Iowa is faring better than the rest of America

RISING above the fields of Nevada, Iowa, advertised proudly as America’s 26th-best small town, is an ethanol refinery. The air around is thick with the smell of yeast. Each day lorries drive up and park above a large grate, corn pouring from their bellies like milk from a cow, the kernels falling below to begin their transformation into ethanol. To see Lincolnway Energy is to recall Iowa’s better days. Last year two ethanol companies filed for bankruptcy. Others have slowed production.

Corbis

Iowa has not been immune to America’s malaise. Important sectors such as manufacturing and business services have shed thousands of jobs. The state’s unemployment toll in February was 26% higher than a year earlier. Chet Culver, Iowa’s governor, is anxious to pass his own stimulus package to augment Washington’s. Yet the gloom is only relative. Iowa’s unemployment rate has risen, but it was still only 4.9% in February. The national average was 8.1% (and is now 8.5%). Michigan would love to have Iowa’s problems.

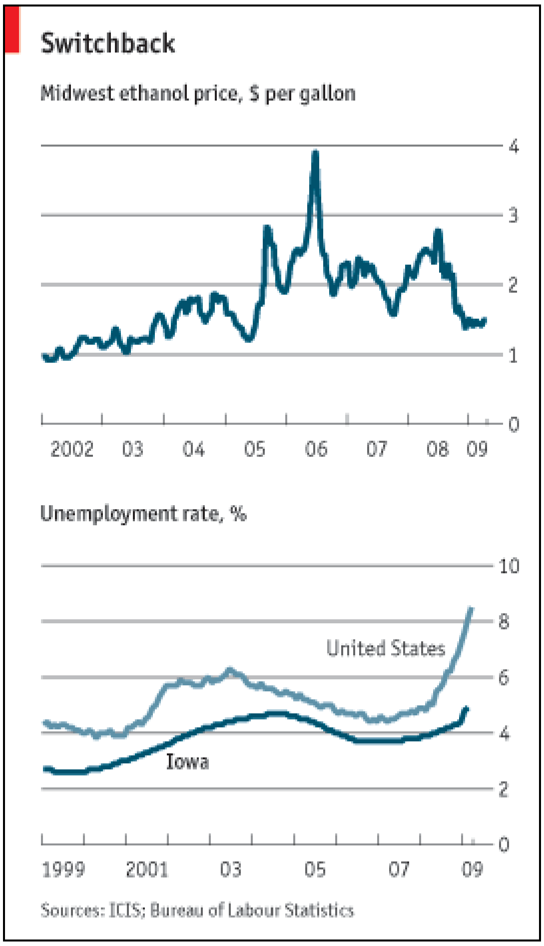
Iowa is not suffering the despair of a bust. It likewise never felt the glee of a boom, says Peter Orazem, an economist at Iowa State University. Historically its economy, like those of other states of America’s plains, has expanded rather slowly. Iowa’s economy grew by 25% in the decade to 2007, compared with national growth of 33%. The property craze gripped sunnier cities than Dubuque and Des Moines.

Before the recession, however, Iowa was enjoying a good stretch. Ethanol production swelled from 440m gallons (1.67 billion litres) in 2002 to 2 billion gallons in 2007. A weak dollar boosted demand for Iowa’s goods. The state’s exports grew 28% in the year up to the first quarter of 2008.

Iowa’s economic base had also broadened. In 2007 manufacturing, services and government were Iowa’s three biggest sectors, with finance and insurance a close fourth. State officials were working to lure bioscience and IT companies too, with considerable success. A chief problem for the Greater Des Moines Partnership, the local development group, was that the labour market was too tight. The partnership even got a band to sing a Des Moines theme song in other cities to lure expatriate Iowans back home.

Iowa trudged upward longer than the rest of America, gaining jobs until May of 2008, but it has now succumbed to the national landslide. Non-farm employment fell by 22,400 in the year to February, with 17,400 jobs lost since October. Some of Iowa’s pangs are common. Professional and business services

have cut 9,400 jobs. The heaviest losses, of 17,000 jobs, have been in manufacturing of durable goods such as John Deere farm machinery. Other ailments are unique. Cedar Rapids is still struggling to recover from floods last June, when the ravenous Cedar river consumed homes and businesses. The little shops in the city's Czech Village are only just starting to come back to life.



Ethanol's expansion, meanwhile, has been squeezed by expensive corn, cheap petrol and tight credit. Lincolnway Energy's Rick Brehm predicts that the most efficient ethanol plants will survive, but admits that the industry was "overbuilt". Many towns remain unwitting passengers on ethanol's roller coaster. Dyersville, the setting for the film "Field of Dreams", had pinned its hopes on a big ethanol refinery. But the plant's owner filed for bankruptcy in October and the refinery now sits idle, waiting for a new buyer.

Nevertheless, Iowa is not drowning in the recession. Non-farm employment has dropped by only 1.5% since February of 2008. Makers of machinery have suffered, but Iowa's food processors remain relatively plump. At $4 a bushel, corn prices are still 75% higher than the 20-year average. Wells Fargo, one of Des Moines's main employers, expects to post record profits this month. Though Iowa may lose more jobs, it is well positioned to bounce back, says Creighton University's Ernie Goss.

And though Iowa's leaders remain bullish on ethanol, the state is supporting other energy projects through a new Iowa Power Fund. For a glimpse of the future visit Newton, in the state's heart. Newton is home to the Maytag Park, the Fred Maytag swimming pool and the Fred Maytag bandstand. In 2007, however, this company town lost its white-goods company. State and local incentives have helped new firms sprout on the north side of town. TPI Composite's building is so big that its workers, many of them former Maytag employees, traverse it on yellow tricycles. Slicing the space are wind blades, each longer than the wing of a 747. Above one door is a sticker that reads, "Iowa: The New Energy Empire". The state may be down, but it is not out.

Lexington

Obama derangement syndrome

Apr 16th 2009
From The Economist print edition

The president is driving some people mad. That may be to his advantage in the short term

Illustration by KAL

BY MOST people's standards Barack Obama has had an excellent week. He enjoyed a counter-Carter moment when navy commandos rescued an American hostage, leaving three kidnappers dead. He gave a measured speech on the economy. And, to cap it all, he gave his daughters a Portuguese water dog named "Bo". What's not to like?

Plenty, according to some people. Mr Obama may be widely admired both at home and abroad. But there are millions of Americans who do not like the cut of his jib—and a few whose dislike boils over into white-hot hatred. The *American Spectator*, which came of age demonising the Clintons, has run an article on its website on Mr Obama entitled "Il Duce, Redux?" The internet crackles with comparisons between Mr Obama and various dictators (Hitler, Stalin and Mussolini) or assorted psychotics (Charles Manson and David Koresh). When Jonah Goldberg, a conservative pundit, praised Mr Obama over the dispatching of the Somali pirates, his e-mail inbox immediately overflowed, he said, with "snark and bile".

A recent Pew poll showed that public opinion about Mr Obama is sharply divided along party lines. Some 88% of Democrats approve of the job that he is doing compared with only 27% of Republicans. The approval gap between the two parties is actually bigger than it was for George Bush in April 2001. Bush loyalists, led by Karl Rove, have duly over-interpreted this poll in order to soften their former boss's reputation as America's most divisive president. Today's Republican base is significantly smaller than the Democratic base was in 2001, so surviving Republicans are more likely to have hard-core views. But there are nevertheless enough people out there who dislike the president to constitute a significant force in political life.

As *The Economist* went to press, the bestselling book in the United States was Mark Levin's "Liberty and Tyranny". Mr Levin frequently denounces Mr Obama on his radio show as an exponent of the second of those two qualities. The new sensation in the world of cable is Fox News's Glenn Beck, who has already attracted 2.2m regular viewers since his show was launched in January. Mr Beck recently apologised to his viewers for saying that Mr Obama's America is on the path to "socialism" when it is really on the march to fascism. Media Matters, a left-wing organisation that monitors the media, reports that, since the inauguration, "there have been over 3,000 references to socialism, fascism or communism" in describing the president.

Rush Limbaugh claims that he has seen an uptick in his audience since he announced that he hopes that Mr Obama fails. He has no time for the idea that all Americans should wish their president well ("We are being told that we have to hope Obama succeeds, that we have to bend over, grab the ankles…because his father was black"). Mr Limbaugh is not the ankle-grabbing type. He has also added Robert Mugabe to the list of people to whom Mr Obama can be likened.

Why are some people so angry? For all his emollient manner and talk of "post partisanship", Mr Obama is just as much an embodiment of liberal America as Mr Bush was of conservative America—an Ivy League-educated lawyer who became a community organiser before launching a political career in one of America's most cosmopolitan and corrupt big cities, Chicago. Mr Obama almost lost the Democratic nomination to Hillary Clinton because of his lack of rapport with white working-class voters. In the general election he did worse than Michael Dukakis in the Appalachian states of Kentucky and West Virginia.

Tough times make for tougher talk

The economic crisis has transformed this cultural suspicion into a much more potent political force. It is true that Mr Obama's solution to the recession—spending public money in order to stimulate demand and trying to prevent a run on the banks—is supported by most economists. Mr Bush would have done much the same thing. But it is nevertheless driving many Americans crazy. April 15th—the last day on which Americans can perform the melancholy duty of filing their tax returns—saw rallies (dubbed "tea parties" after the Boston one) in every state, 500 or so in all. The protesters, some of whom dressed in three-cornered hats and waved "Don't tread on me" flags, repeated a litany of criticisms that has been mounting since Mr Obama won the election—that he is a big government socialist (or fascist) who wants to take people's money away and crush their freedoms.

It is hard to judge so early in the game what the rise of anti-Obama sentiment means for the Obama presidency. Bush-hatred eventually spread from a molten core of leftists to set the cultural tone of the country. But Obama-hatred could just as easily do the opposite and brand all conservatives as a bunch of Obama-hating cranks.

What is clear is that the rapid replacement of Bush-hatred with Obama-hatred is not healthy for American politics, particularly given the president's dual role as leader of his party and head of state. A majority of Republicans (56%) approved of Jimmy Carter's job performance in late March 1977. A majority of Democrats (55%) approved of Richard Nixon's job performance at a comparable point in his first term. But today polarisation is almost instant, thanks in part to the growing role of non-negotiable issues such as abortion in American politics, in part to the rise of a media industry based on outrage, and in part to a cycle of tit-for-tat demonisation. This is not only poisoning American political life. It is making it ever harder to solve problems that require cross-party collaboration such as reforming America's health-care system or its pensions. Unfortunately, the Glenn Becks of this world are more than just a joke.

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Cuba and the United States

It takes two to rumba

Apr 16th 2009 | HAVANA
From The Economist print edition

Raúl Castro's reaction to a small American olive branch may be even more cautious than Barack Obama's offering of it

Illustration by David Simonds

SO FAR the story has followed the script. Barack Obama's administration on April 13th announced a loosening of the half-century old American economic embargo against Cuba, fulfilling a campaign promise. Officials said that all restrictions on visits and remittances to the island by Cuban-Americans will be scrapped, and that American firms would be allowed to provide telecoms services to Cubans, including telephone roaming and fibre-optic broadband connections with the United States (if Cuba agrees). The embargo itself will remain, at least until the American Congress decides otherwise.

The measures thus amount to a change of tactics, rather than a fundamental policy shift. The administration hopes that additional material support to the Cuban people, and connecting them with the outside world, will help them to push for democracy. The changes are symbolically important. They may blunt, but not silence, calls from Latin American leaders at a Summit of the Americas to be attended by Mr Obama in Trinidad between April 17th and 19th for the United States to restore diplomatic relations with Cuba.

The American Congress may go on to lift the ban on travel to Cuba by other Americans, and perhaps liberalise some trade. But there is a battle in Congress over the issue. For those who favour change, "the key issue is to understand that the embargo is not an instrument for [the] democratisation" of Cuba, argues Robert Pastor, who was in charge of relations with Latin America in the Carter administration. Others say the embargo should remain until Cuba frees its political prisoners.

In his new role as a blogger, Fidel Castro said that while he did not question Mr Obama's sincerity, the measures did nothing to dismantle the "genocidal" embargo. And he scorned Brazil and other allies who have called for Cuba's readmission to the Organisation of American States, saying that his country had no desire to rejoin the body from which it was suspended, at the United States's behest, in 1962.

Raúl Castro, who replaced his elder brother as Cuba's president last year, has said he wants "dialogue" with Mr Obama. The two governments have co-operated in the past about migration and drugs and could do so again. But on the main issue that divides them—Cuba's communist system and its suppression of human rights—they remain as far apart as ever.

On taking over, Raúl Castro raised the hopes of long-suffering Cubans when he first promised "changes of structure and concept" in the centrally-planned economy and then pledged to "improve people's spiritual and material lives". But his first year in office disappointed. He took timid steps to turn over more land to private farming, and gave more leeway to some small businesses, such as private taxi drivers. But Cubans have seen little or no improvement in their daily grind.

After several years of growth, due largely to subsidies from Hugo Chávez's Venezuela, the economy has been battered by hurricanes, lack of credit and a plunge in the price of nickel, its main currency earner (apart from tourism). Workers are being sent home, workplace snacks and meals cut and even the traditional perk of beer, rum and (government-issue) cake for weddings and a free hotel room for the honeymoon was recently eliminated.

But Raúl has consolidated his power. Most dramatically, he shuffled the cabinet last month, purging Carlos Lage, who for the past 15 years had been de facto prime minister and economic supremo. Along with him went Felipe Pérez Roque, the foreign minister. Mr Lage (57), and Mr Pérez (44) symbolised for outsiders and some Cubans a hope of reform and of the transition to a Cuba without the Castro brothers.

That made them dangerous. In classic Stalinist fashion, they apologised for "errors". Not only had they succumbed to "the nectar of power" and ambition, but also "the enemy outside built up their hopes with them," Fidel said of the two men, whom he had promoted. His statement meant that he, rather than Raúl, took the blame for sackings which were unpopular with younger party members, says Mr Pastor, who visited Cuba last month.

Their fall from grace came as a shock to Cuba-watchers and has prompted conspiracy theories. The latest official version—leaked this month to foreign journalists without corroborating evidence—rings true. It centres on their ties to Conrado Hernández, a Spanish-Cuban businessman arrested earlier this year on suspicion of spying. Mr Hernández was a close personal friend of Mr Lage. Together with Mr Pérez and their families, they would meet at Mr Hernández's ranch for roast pig, rum and dominoes. Talk, spiced with irreverent jokes, would turn (as it does in many Cuban homes) to how the Castro brothers were slowing needed reforms. These conversations were secretly recorded by Mr Hernández—and by Cuban intelligence.

In all, Raúl Castro's purge swept away eleven ministers, including most of the economic team. Their replacements are Raúl's people, including several generals from the armed forces which he led for half a century. They will be charged with implementing a new law on "perfecting businesses". This requires all state firms to act autonomously and adopt capitalist management and accounting, but without privatisation or adoption of other market mechanisms. This system was pioneered by the defence ministry in the late 1980s but faces bureaucratic resistance.

Although Fidel Castro has recently appeared to be in better health (he was close to death following repeated abdominal surgery in 2006, according to unofficial reports), the cabinet shuffle has ended his habit of running a parallel government from his own office. One of those sacked, Otto Rivero, ran "The Battle of Ideas", a Fidel-era operation with a big budget for construction and other projects. These and other special projects, such as Havana's biotechnology complex and computer-science university, have been transferred to relevant ministries. "There is just one government now," a Cuban analyst said. "It is more collegiate and Raúl personally chairs every meeting. The point is not that the *Fidelistas* are out and *Raulistas* are in, but that there is a new way of doing business."

This sets the stage for a long-overdue Communist Party Congress (the first since 1997) later this year. Such gatherings do not decide policy, they ratify it. That policy is continued one-party rule and a state-run economy that will be tweaked, rather than radically reformed. Future leaders will be drawn from the ranks of middle-aged provincial party secretaries and rising military officers, party insiders say. There will be no stars under Raúl Castro, no individual young leaders on whom outsiders can pin their hopes. This is the scenario that Mr Obama's measures are intended to influence—and change. But on their own, they look unlikely to do so.

Bolivia's Evo Morales

Fasting and dealing

Apr 16th 2009 | LA PAZ
From The Economist print edition

A presidential hunger strike

DURING his career as a cocaworkers' leader, Evo Morales took part in hunger strikes on 18 occasions. Then he was elected as Bolivia's president. So it came as a surprise when just before Easter he unrolled his mattress on the floor of an ornate state room in the presidential palace and began a five-day political fast, fortified by chewing coca leaves. This time the object of his gesture was not to change government policy but to implement it.

In January Mr Morales won a referendum approving a new constitution inspired by his Movement to Socialism (MAS). This calls for a fresh election on December 6th, in which the president hopes to win a second term. But the opposition, which controls the Senate, was holding up the requisite electoral law, because the government refused to agree to a new electoral register.

The need for this was stressed by a European Union mission which observed the referendum. The opposition fears that a government programme to give identity cards to Bolivians who lack them was abused to swell the government's vote in rural areas. When the president of the electoral court said there was no time to organise a new register, the opposition walked out, leaving Congress inquorate, and prompting Mr Morales to begin his fast.

But it was the government, not the opposition, which gave ground. The court decided that a new electoral roll with biometric data could indeed be ready in time. The government agreed to find the $35m this may cost. For the first time it will include many of the 2m Bolivians who have migrated abroad.

Reuters

President and protester-in-chief

The government retreated, too, on earlier talk of earmarking up to three dozen seats in the new, 121-seat lower house of Congress for candidates of indigenous descent, to be chosen in special electoral districts. It was unclear whether this would allow certain Bolivians to vote twice. Even some in the MAS had reservations. There will now be only seven such seats.

Mr Morales remains popular, thanks to his championing of indigenous Bolivians and his nationalisation of the natural-gas industry, which has boosted the government's finances. He seems assured of a second term. But the opposition reckons that in a fair vote it will deprive him of a strong majority in the new Congress. Despite Mr Morales's hunger strike, its prospects of doing so have improved.

Mexico and climate change

What's hot, green and Mexican?

Apr 16th 2009 | MEXICO CITY
From The Economist print edition

Felipe Calderón wants to talk to Barack Obama about drugs—and windmills

ASK anyone who has read a newspaper in the past few months what is the greatest threat faced by Mexico, and the answer will inevitably be the drug gangs whose violence resulted in over 6,000 deaths last year and is the main reason Barack Obama came to visit this week. Yet even though Felipe Calderón, the country's president, has staked his job on his crackdown against the traffickers, he has a different answer to this question: global warming. "Climate change is the most important challenge that human beings are facing in this century," he said on a recent visit to London.

That might seem odd coming from the conservative leader of an oil-exporting developing country. But Mr Calderón has chosen to make the fight to reduce carbon emissions one of the hallmarks of his presidency, at least rhetorically. He wants Mexicans to commit to cutting their own emissions by half by 2050. He has urged the setting up of a global "Green Fund," which would receive contributions from all but the poorest countries in the world to finance environmentally friendly projects. Mr Obama praised his suggestion of a North American cap-and-trade scheme.

Mr Calderón's officials say his enthusiasm is motivated by pure utilitarian maths: Mexico is both one of the countries most vulnerable to global warming and one rich in renewable energy resources. It has been hit by extreme weather several times during his term: in 2007, a devastating flood put 80% of the southern state of Tabasco under water and caused some $5 billion in damage, while farming in the north has been hurt by a lengthy drought. Mexico lies in the path of hurricanes both from the Atlantic and Pacific which many scientists believe are becoming stronger as a result of rising sea temperatures. Rising sea levels from melting polar ice caps threaten nearly half of the country's eastern seaboard.

Since Mexico produces just 1.5% of the world's emissions, it will be affected by climate change regardless of what it does at home. But greens argue that it must practice what it preaches—especially if it wants to influence the debate on the issue in the United States. Moreover, officials see potential economic and diplomatic gains.

Mexico's oil output is shrinking fast. But it has huge potential to produce renewable energy. Around 17% of its electricity now comes from hydro dams. Iberdrola, a Spanish utility, is building a giant wind farm at La Ventosa ("the windy place"), an area in the southern state of Oaxaca which features gusts strong enough to topple trucks. This will provide power to 200,000 people, and avoid the emission of 150,000 tons of carbon dioxide each year. The government is also in talks with Q-Cells, a German company, over setting up a factory to manufacture solar panels in an investment that could total up to $3.5 billion over five years. Mr Calderón is also seeking American investment in solar power in northern Mexico. According to a study by McKinsey, a management consultancy, the investment needed for Mexico to cut its emissions by a quarter from current levels by 2030 would see a net gain of 500,000 jobs.

Mr Calderón's vocal advocacy of the issue also reflects some geopolitical opportunism. Although Mexico has the world's 11th largest economy and population, it tends to punch below its weight in international affairs, largely because its close integration with the United States leads some to see it as an American satellite.

Taking the initiative on climate change might help Mr Calderón give Mexico a higher profile. Other large developing countries have been less willing to agree to cut their emissions, though Brazil may change its mind (see article). According to Juan Manuel Gómez Robledo, a senior Mexican diplomat, Mexico's stance on climate change "increases our capacity for political dialogue internationally" and helps the country act as a bridge between the developed and developing worlds.

But will Mr Calderón be able to achieve the 5% drop in emissions he has promised by the time he leaves office in 2012? ProÁrbol, a much-hyped reforestation scheme, is widely considered a failure: of the 250m

trees that were planted under the programme in 2007, officials admit that 40% have already died. Others put the figure much higher. The government's climate-change plan makes no mention of how its lofty goals will be financed, a serious obstacle given the sharp slowdown in the Mexican economy. It would be more credible if it was backed by a carbon tax or local cap-and-trade scheme so that renewable energy could compete with fossil fuels on price. But the president is a quietly determined man, as he has shown in his battle with the drug traffickers. It is too early to dismiss his green credentials as merely for show.

Brazil and climate change

Dancing with the bear

Apr 16th 2009 | BRASÍLIA
From The Economist print edition

A soya king's change of heart on the rainforest

WHEN Carlos Minc, Brazil's environment minister, recently called for developing countries such as his own to adopt targets to curb carbon-dioxide emissions, there were mumblings of disagreement from other bits of the federal government. The powerful foreign ministry, which thinks Brazil should hew to the line of China and India that only rich countries should slash their emissions, is particularly sore about Mr Minc's attempts to bounce it into a new policy without prior approval. But away from Brasília, there are signs that Brazil is moving in his direction.

Take Blairo Maggi, the governor of Mato Grosso state. Mr Maggi's family company is the world's biggest soya producer. His state has a poor record on slowing deforestation. He is loathed by many NGOs and was depicted on a magazine cover as "Blairo Chainsaw-Hands". But Mr Maggi seems to have had a change of heart. He recently hosted a conference on developing markets for ecosystem services, with the idea of paying stewards of the forest to keep the trees standing.

After Mr Maggi became governor in 2003, Mato Grosso's rate of deforestation accelerated markedly. Things have improved somewhat since, but Mr Maggi still takes a combative approach to being told what to do by greens. He has had rows with Brazil's national space research institute, which monitors deforestation by satellite, contesting the figures it produced when he was accused of letting deforestation accelerate again last year. "We're dancing with the bear," said one of the participants in the conference.

The meeting in Cuiabá, Mato Grosso's capital, was attended by governors of Amazonian states and foreign NGOs with a preference for market solutions to climate change. Some Brazilian NGOs refuse to work with Mr Maggi in public, though the governor says that his relationship with them is thawing. Some foreigners are more pragmatic. "If we're not effective in working with people from the agriculture industry, we're going to lose," says Michael Jenkins of Forest Trends, an American NGO.

There are already some small schemes in Amazonas state in which foreign companies eager to offset carbon emissions pay a fee for forest preservation. Last year Brazil launched a national fund along these lines, seeded with a $100m donation from Norway. Mr Maggi wants something similar. "We need to stop deforestation but we need the finance to do it," he says.

Mr Maggi says that only 8% of Mato Grosso's territory is given over to commercial farming. Its high productivity means that the state is Brazil's biggest producer of cotton and rice as well as soya. By contrast, about a quarter of its land is occupied by extensive cattle ranches that produce one cow per hectare per year. Make this land more productive, Mr Maggi argues, and there is no need to push into the forest to increase output. Larger producers are also more capable of sticking to agreements not to use recently deforested land, such as the one that currently exists between NGOs and soya producers, including Mr Maggi. Unfortunately the roaming cattle ranchers follow a different logic and will not be turned into agro-businessmen overnight.

Even so, Mr Maggi's change of emphasis is significant. If Brazil gets more enthusiastic about foreigners subscribing to funds to save the forest, these might gradually tip the scales against the chainsaws. Instead of acting as a kind of savings account to be chopped down and monetised when required, the standing forest could become a source of income. And for Brazil it would be a fairly painless way to curb carbon emissions.

Thailand's political crisis

Dousing the flames

Apr 16th 2009 | BANGKOK
From The Economist print edition

A truce on the streets may not herald a durable political peace

EPA

BAR-HOPPING visitors to Thailand are warned that minor brawls can turn deadly in the blink of an eye. The same applies to political violence. Over four days of mayhem, Thailand lurched from a mob invasion of a regional leaders' summit in Pattaya to a military crackdown on protesters in Bangkok and then, on April 14th, to a negotiated surrender to authorities. By restoring order, the reeling government, and the prime minister, Abhisit Vejjajiva, won themselves a temporary breathing space.

But a ceasefire is not a peace deal. More ruptures seem certain as Thailand fumbles for a path out of perennial political conflict. Politicians talk of reform, but cannot agree on what to change. The army has closed ranks for now behind Mr Abhisit but its motivations are hard to fathom. Anger and frustration curdle in rival political camps, fed by a partisan press. Even the standard Thai solution of holding fresh elections is unlikely to work. Mr Abhisit's Democrat Party, which heads the ruling coalition, justifiably fears that, in a free and fair election, voters would, as on the past three occasions, elect a government loyal to Thaksin Shinawatra, a former prime minister. Such a government would, inevitably, face protests by the royalist People's Alliance for Democracy (PAD), who wear yellow shirts and despise Mr Thaksin.

The latest unrest in Bangkok was led by red-shirted protesters roused by a televised call to arms by Mr Thaksin, a self-exiled fugitive. For three weeks, tens of thousands of red shirts, who call themselves the United Front for Democracy Against Dictatorship (UDD), besieged Mr Abhisit's offices, calling for his resignation and a restoration of unfettered democracy. On April 8th they did the same at the residence of Prem Tinsulanonda, the chief adviser to King Bhumibol and the alleged plotter of a 2006 coup that ousted Mr Thaksin. Three days later, in a remarkable lapse of security, hundreds of unarmed UDD supporters stormed a seaside resort where Asian leaders were gathering, forcing a humiliated Mr Abhisit to cancel the event. The next day he declared a state of emergency in Bangkok to disperse the protesters.

This was a high-stakes gamble that paid off for Mr Abhisit. He fared better than his two predecessors, who faced protracted PAD protests last year. After a hesitant start, combat troops contained sporadic rioting, including pitched battles between red shirts and residents. Over 100 people were injured and two died. The army then cordoned off the main protest camp, where only a few thousand UDD faithful remained. Outgunned and isolated, their leaders surrendered on April 14th, as the rank-and-file trudged past security checkpoints, still mouthing defiance. "We didn't lose. We can do it again if we want to," said Jua Saeng-rattana, an elderly cook.

Pulling off another red invasion of Bangkok may be harder. Images of protesters attacking Mr Abhisit's car and torching buses hurt their credibility as peaceful pro-democracy activists. It also exposed Mr Thaksin as a demagogue who is ready to incite a revolt from his Dubai redoubt. Middle-class voters who admired Mr Thaksin's leadership skills may become more wary of the rural and urban masses who support him and more receptive to the PAD's conservative agenda. By taking on Mr Abhisit and his royal backers, UDD leaders apparently bet that a show of mass support would split the security forces and force a reckoning with Mr Thaksin. That never happened. Instead, it is likely to be hardliners in the government and army who call the shots now.

Naturally, the reds see it differently. They accuse the army of shooting dead several protesters and hiding the bodies (the army has denied this). They also claim that the rioting was stoked by pro-government militia and plainclothes soldiers to discredit their movement. In the past, the army's playbook has featured such tactics. But its mopping up of red-shirt resistance was a fairly professional job. It does, however, raise the question of why the army refused to use emergency powers last year to eject the PAD from Bangkok's main airport—arguably a graver security threat than a rabble at a roundabout.

The same double standard applies to the protest organisers. Two UDD leaders have been detained and charged, and arrest warrants issued for others on the run. But legal action against PAD leaders has all but stalled under Mr Abhisit. Even Thais who disdain both the rival colour-coded camps smell something fishy here. Red shirts who believe that the ruling elite are conspiring to keep them down will seize on this as evidence. Their anger is unlikely to dissipate and could easily ignite again, just as quickly as it did last time.

Fiji's constitutional coup

Puppet show

Apr 16th 2009 | CANBERRA
From The Economist print edition

Digging in for the long haul

FLEETINGLY, on April 10th, Fiji's armed forces commander, Frank Bainimarama, seemed to lose his other job as prime minister. President Ratu Josefa Iloilo announced the abrogation of the country's constitution, the sacking of the judiciary and the postponement of elections until 2014. Calling the president's decision deeply regrettable, Mr Bainimarama resigned and said he was heading back to barracks. Yet the next day, he and his cabinet were back in their offices, as if nothing had happened. Belying the pretence of normalcy, however, soldiers were sent into the newsrooms of the country's newspapers, and television and radio stations to prevent "negative" publicity; several foreign journalists were booted out of the country.

Mr Bainimarama said he had nothing to do with Mr Iloilo's decision. In truth, the 88-year old head of state is a puppet of the army, which is said to dose him with medication before he appears on television. Mr Bainimarama also regularly claims to be subject to the dictates of a shadowy military council. But in reality he is in charge, having purged his opponents and cultivated loyalty through rapid promotions and big pay rises for both officers and rank-and-file. Even so, at press conferences held after the abrogation of the constitution, he judiciously chose to be flanked by his most loyal naval officers, not the generals.

The trigger for the jettisoning of Fiji's constitution was a ruling by the Court of Appeal declaring illegal Mr Bainimarama's interim regime, which took power in a coup in 2006. The court demanded that a neutral caretaker be appointed prime minister, pending the dissolution of parliament and a general election.

Mr Bainimarama was already resisting foreign pressure to go to the polls. He claims that Fiji's electoral system needs to be reformed, to escape the race-based politics that generated coups in 1987 and 2000. In fact, whatever the electoral system, politics would remain polarised between ethnic Fijians and the Indian minority.

Fixing the economy may be even harder than mending the political system. Even before the latest political crisis, the central bank had lowered its forecast of GDP growth for 2009 from 2.4% to -0.3%. Declining exports had left foreign-exchange reserves equivalent to 2.7 months of imports, and shrinking tax revenue had forced the prime minister to impose a 50% cut in government operating expenditure. This week the Fiji dollar, which is pegged to a basket of currencies, was devalued by 20%.

Since the constitution was scrapped, soldiers have detained or placed under house arrest local journalists, judges and, reportedly, the director of public prosecutions. In addition, Savenaca Narube, the long-serving governor of the central bank, has been forced from office, and soldiers stationed in the bank building. The motive may be not just to avoid the flight of capital, but also to have done with Mr Narube's urging for restraint in public spending. The government may be hoping it can buy back some of its tarnished legitimacy.

Indonesia's election results

One winner, many losers

Apr 16th 2009 | JAKARTA
From The Economist print edition

The president on course for re-election

IN THE week after Indonesia's parliamentary election on April 9th, the much-criticised election commission tabulated less than 7.5% of the estimated 123m votes cast. But five independent "quick counts", based on samples of several thousand polling stations, produced almost identical results. So no surprises are expected.

President Susilo Bambang Yudhoyono is the undoubted winner. His Democratic Party almost tripled its vote from the last election in 2004 to take first place among the 38 contesting parties with a preliminary 20.5%. Golkar, led by Jusuf Kalla, the vice-president, and the largest party in the old parliament, is one big loser, with 14.5% (down from 21.6%). So is the opposition Indonesian Democratic Party of Struggle, or PDI-P, of Megawati Sukarnoputri, a former president, also with 14.5% (18.3%).

A cluster of Islamist parties saw their combined support slump from 39% to 29.5%. Only the Prosperous Justice Party, or PKS, the most Islamist party, which came fourth with about 8.4%, bucked the trend. Nine parties appear to have passed the threshold of 2.5% of the national vote needed to win seats in the 560-member parliament. These include two new parties, Gerindra (4.5%) and Hanura (3.8%). Their leaders are former generals, respectively Prabowo Subianto and Wiranto.

The election was undoubtedly chaotic with more than 1,000 reported electoral violations, twice the number recorded in 2004. But despite loud, if largely baseless, cries of foul by some losers there is little likelihood the result will be nullified.

AFP

Yudhoyono holds all the cards

It was striking that popular, which usually also means competent, regional officials did well. In at least three of the 33 provinces, the party of the popular governor not only won but did markedly better than elsewhere. Directly elected local officials seem certain to grow in importance as national politicians.

Attention now turns to July's election for the powerful presidency. Candidates must be nominated by parties, or coalitions of parties, that won more than 20% of the seats or 25% of the popular vote in the parliamentary election. There could be as many as four pairings (the president and vice-president run as a ticket). But it is hard to look beyond Mr Yudhoyono.

One exit poll of 7,500 voters gave him 42% support, Ms Megawati 13.4%, Mr Prabowo 5.7% and the rest even less. In another poll, conducted in February, Mr Yudhoyono scored 64% to Ms Megawati's 23% in a head-to-head race.

Mr Yudhoyono's dilemma is his choice of running mate. He has indicated he wants a strong parliamentary base and so Mr Kalla is the most obvious choice. But Golkar is deeply divided and Mr Kalla's enemies have been energised by the party's poor showing. PKS is lobbying hard for the vice-presidency but might cost the secular Mr Yudhoyono votes and should be satisfied with a few cabinet seats. Mr Yudhoyono is expected to make his choice once Golkar has finished its bloodletting.

If Golkar sticks with Mr Yudhoyono, his opponents face an uphill struggle. The appeal of Ms Megawati, whom My Yudhoyono trounced in 2004, is waning but no other PDI-P figure has a remotely similar stature. Her best chance of unseating Mr Yudhoyono may be to swallow her considerable pride and join a Prabowo ticket. But most analysts reckon that, whatever the pairings, only a huge unforeseen scandal can halt the Yudhoyono juggernaut.

Health care in China

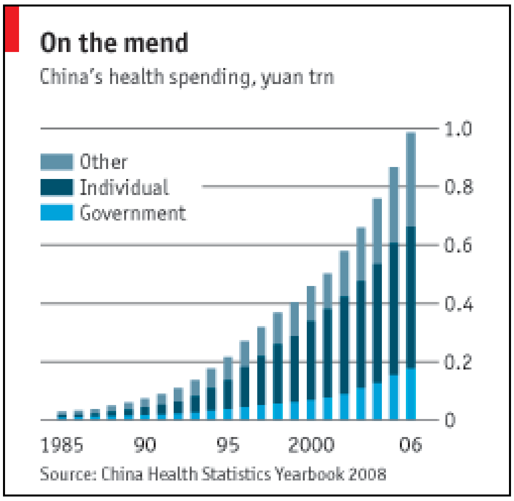
Will patients be rewarded?

Apr 16th 2009 | BEIJING
From The Economist print edition

The government's plans are still something of a mystery

RARELY in Communist China's history has such an important government policy been debated so openly for so long. Such deference to public opinion would be cause for celebration were it not for the urgency of the issue: health-care reform. After years of dithering amid mounting public anger at the often prohibitive cost of treatment, the government has a plan.

Two documents issued on April 6th and 7th set out reform targets through to 2020 as well as more specific objectives for the next three years. The broad goals remain unchanged from draft proposals released last October after a delay of several months. Officials say 200m Chinese have no insurance now. But by 2020 China is to have a "relatively robust" government-financed health-insurance system, with more than 90% of citizens covered by 2011. Also unchanged is the figure of 850 billion yuan ($125 billion), which the government said in January it intended to spend on these reforms during 2009 and the two subsequent years.



The government admits that achieving its goal of building a "safe, effective, convenient and affordable" health service will not be easy. For much of the past two decades, many Chinese lament, the trend has been in the opposite direction. Health-care provision, once rudimentary but accessible and widely admired by other developing countries, has been turned into a profit-driven system notorious for its corruption, indifference and expense.

Official recognition of this mess became apparent in 2003 during an outbreak of SARS, an often fatal respiratory ailment. Its spread highlighted the difficulty of handling such emergencies when many Chinese were afraid of going to hospital because of the potential cost. New leaders who took over in 2002 and 2003 tried to consolidate their power by emphasising the party's concern for the plight of the poor. But it was only in 2006 that work began on drawing up a comprehensive plan for health-care reform.

Even amid the global economic crisis, the government has appeared in no hurry. Many economists argue that the impact of the crisis could be mitigated by stimulating domestic consumption. One way to do this would be to reduce the incentive for households to save money as a precaution against health emergencies. But the recent documents, which were circulated secretly within the bureaucracy for three weeks before being made public, give no clear target even by 2020 for how much citizens can expect to be reimbursed for hospital treatment. Even for those with government insurance, a substantial amount still usually has to be paid out of the patient's own pocket. In the countryside, despite the government's rapid rolling out of a new insurance scheme in the past few years, many peasants still shy away from hospitals.

A big objective of the reforms is to break the dependence of government-owned hospitals on the payments exacted from patients for tests, medicine and other treatments. Government subsidies account for a tiny amount of hospitals' revenue. Reports in the state-run press say more than 90% of their income comes from charges (poorly regulated and often excessive) for providing services and medicine. Weaning hospitals and doctors off these sources of funds will be a colossal task.

The government's plan is to publish a list this month of essential medicines. Over the next three years, government-run medical facilities will be required to give preference to drugs on this list and profits made on them by health-care providers will be phased out. They will receive extra subsidies to make up for their losses. But hospitals have often profited from illegal mark-ups on medicine and from commissions from manufacturers on the sales of their drugs. The new subsidies are unlikely to take this into account, so

hospitals could see their revenues shrink. Hospitals have also proved adept in the past at evading price controls on particular drugs by prescribing other medicines or unnecessary extra tests and treatments.

Another big obstacle to reform could be a lack of enthusiasm among local governments. Of the planned 850 billion yuan in spending, officials say only 40% will come from the central government. Provincial and lower-level authorities may be reluctant to divert resources to areas that do not produce immediate benefits in terms of boosting employment and GDP growth.

How much of an extra burden local governments will have to bear is still unclear. A deputy minister of finance, Wang Jun, told reporters on April 8th that the 850 billion represented “additional” spending on health care. *Caijing*, a Beijing business magazine, has pointed out that over the three years, the central government’s annual average share of this would be about 111 billion yuan. This year’s budget for health spending by the central government (including reform-related expenditures) is only 118 billion. The government’s numbers do not appear to add up.

Dialysis in China

Free for now

Apr 16th 2009 | TONGZHOU
From The Economist print edition

How to embarrass the government into providing health care

IN TONGZHOU, a town near Beijing, one group of people appears to have reaped immediate benefits from official efforts to put a positive spin on health-care reform. A group of kidney patients had pooled their meagre resources to buy their own second-hand dialysis equipment in order to avoid crippling hospital charges. In March the local government confiscated it. But sympathetic coverage from local newspapers has helped persuade officials not to leave the impoverished patients to the mercy of the health system. They are now enjoying free dialysis at the government's expense, something almost unheard of in China.

Officials had accused them of violating health regulations. Indeed, the grubby courtyard next to a rubbish tip down the dirt lane housing the equipment does not inspire confidence. But one woman, who scrapes a living by selling sex aids and whose peasant family back in the northern province of Shanxi saves all it can to help her with her medical expenses, says dialysis in a hospital costs more than four times as much as their do-it-yourself method.

The government has told the patients it is trying to find a long-term "solution" to their problem. They fear this will eventually mean returning to their distant hometowns for treatment. The reforms aim to give patients greater freedom over where they can enjoy subsidised health care, but for now many can do so only in their places of official residence. The chances of free dialysis away from Tongzhou, some of them stoically accept, are zero.

India's election

The untouchable and the unattainable

Apr 16th 2009 | RAJGARH, MIRZAPUR DISTRICT
From The Economist print edition

As India's general election begins, a dalit leader from its largest state and most important battleground, Uttar Pradesh, hones her national ambitions

AFP

WAVING regally, with fingers and thumb touching, Mayawati greets 100,000 of India's poorest people, and they wave back. Smiling sweetly, the 53-year-old chief minister of Uttar Pradesh (UP) plonks her handbag, then herself, onto a blue armchair facing the crowd, and awaits presents. The local candidate for her Bahujan Samaj Party (BSP) proffers an elephant—the BSP's electoral symbol—made in silver. Then Miss Mayawati stands and urges the people of Mirzapur, a district of eastern UP that participated in the first round of India's month-long general election on April 16th, to vote for the elephant. "UP is ours, now we are going for Delhi."

The crowd, mostly *dalits* (Hinduism's former "untouchables"), to whose interests the BSP is dedicated, is restless. Miss Mayawati is a poor public speaker and her message, that the Congress party failed to uplift many wretched *dalits* while ruling UP and India for over three decades, is familiar. But, as a *dalit* herself, who won power in UP in 2007 for a fourth time, and who has accrued an admitted fortune of over $12m during her political career, she is an inspiring presence. Asked what it would mean to her if Miss Mayawati one day fulfils her ambition to lead India, Pyari, a poor woman in the crowd, says: "I'd feel as if I was prime minister myself." Miss Mayawati, moreover, is not only addressing Mirzapuris, who she hopes will elect her candidate, from the low-caste Patel community, out of Hindu caste-loyalty. Rather, she is speaking to all India.

The BSP is expected to put up candidates in around 500 of the 543 seats being contested, aiming to become the first regional party in India to grow into a national one. India's two biggest parties, the Hindu-nationalist Bharatiya Janata Party (BJP), which will have around 430 candidates, and Congress, which will put up around 400, are in decline and many think Miss Mayawati could succeed in her aim. As evidence, they cite the BSP's stunning victory in 2007, when it won the first outright majority in UP for nearly two decades. Moreover, Miss Mayawati could become India's prime minister with a more modest general-election result. With 50 parliamentary seats (80 are up for grabs in UP alone), the BSP would probably be India's third-biggest party. If this made it a potential kingmaker to any of the three likely coalition mainstays—Congress, the BJP or a host of regional parties called the "third front"—Miss Mayawati would demand to be queen.

Regional wrecker

This would horrify India's English-speaking elite. Venal, autocratic and nakedly opportunistic, Miss Mayawati is the epitome of the wrecking regional leader, a type that has helped ensure, during two decades of coalition rule at the centre, that India's governments have mostly been quarrelsome, inefficient

and corrupt. And, as a *dalit*, she stands out in an intelligentsia dominated by high-caste Hindus.

The BSP has no ideology. It is a vehicle for the ambition of its inspiring leader, masquerading as a promoter of *dalit* rights. In fact, there is little evidence to suggest *dalits* do better under the BSP than any other party: in UP Miss Mayawati is putting up *dalit* candidates only in the 17 seats reserved for the group under an affirmative-action scheme. The BSP has no manifesto, offering instead a 20-page "appeal" for votes, including the line: "Our party wants growth of capital and not development of capitalists in the country."

Yet Miss Mayawati's electoral record is impressive. In UP's last election, the BSP won 206 out of 403 seats, more than twice its previous tally. It also increased its vote-share from 23% to 30%—even though *dalits*, who mostly voted BSP, represent only 22% of the state's 175m people. It achieved this success by appointing non-*dalits*, including high-caste Brahmins, as candidates. (Though its extra votes came mostly from low-caste Hindus and Muslims; the BSP got only 17% of the Brahmin vote.) At the same time, the party has extended its support among *dalits*—of whom India has 250m, or one-fifth of the population—in neighbouring states. In a cluster of state elections in December, it increased its vote share in Delhi from 2.5% to 14%; in Madhya Pradesh from 5% to 11%; and in Rajasthan from 3% to 7.5%. To win 50 seats in the general election, it must repeat its success in UP, where its candidates include 20 Brahmins, and pick up a few seats elsewhere.

This seems possible, but—like almost any outcome in Indian elections—not quite probable. The BSP's main rival in UP, the Samajwadi Party (SP), which was founded to look after low-caste Yadavs, is well-organised and has a similar cross-caste strategy. Its candidate in Mirzapur is also a Patel. In fact, though it lost control of UP in 2007, the SP's vote-share remained intact, at 25%. If disgruntlement with the BSP's state government, which has announced some grand road-building plans but achieved little, costs the *dalit* party non-*dalit* votes in this election, the SP could even match its tally. A recent poll for NDTV, a television news channel, suggests the BSP will win 35-40 parliamentary seats—an advance on the 19 it won in 2004; but, as far as Miss Mayawati's prime-ministerial ambitions are concerned, probably no cigar.

To win power in India—in future elections, if not this one—Miss Mayawati will have to purloin Congress's traditional base: poor, rural Indians, including *dalits*. Hence her speech in Mirzapur, a seat Congress has almost no chance of winning. For encouragement, she has only to consider Congress's recent evaporation in UP, the home-state of its dynastic rulers from the Nehru-Gandhi family. In 1984, the last time it won an outright majority, and the year the BSP was founded, Congress won 83 of UP's then 85 seats. In 2004, when it came to power in Delhi with 145 seats, only nine were in UP. It is not expected to fare any better in this election.

AFP

Utter Powerbase

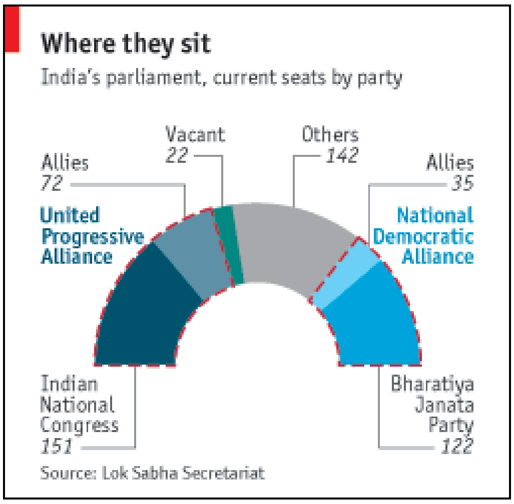
UP was also the cornerstone of the BJP's former rule. The party surged from nowhere during the 1990s, to head coalition governments between 1998 and 2004, on the back of its campaign to build a temple to the Hindu god Ram on the site of a mosque in Ayodhya, in central UP. In 1998, it won 57 of its 179 seats in UP, more than it won in any other state. In 2004, when it was narrowly and unexpectedly pipped by Congress, the BJP won just ten seats in UP. The BSP and SP won 55 between them.

For any party to muster a majority in India, which is impossible in this election, it would almost certainly need strong support in UP. The *dalit* party also looks well-placed to win *dalit* votes from Congress outside the state. Miss Pyari, that disciple in Mirzapur, is typical: before being mesmerised by Miss Mayawati, she voted Congress. But it is still hard to imagine the BSP, or any erstwhile regional party, ever coming close to achieving a national majority.

Like almost all India's parties, the BSP has also emulated Congress's great weaknesses. Its leader is even

more unaccountable than Congress's recent Gandhi rulers, including Sonia Gandhi, the current one. Like the Gandhis, and the leaders of many Indian parties, Miss Mayawati inherited the job: in her case from the BSP's founder and her alleged lover, Kanshi Ram. The BSP's candidates are selected by its leaders, as are Congress's, the SP's and most other parties', and often they are drawn from the same pool of local toughs. Indeed, given the parties' high rates of candidate-turnover, many would-be parliamentarians oscillate between them. For aspirants who fail to get any party's endorsement, new parties are formed.

Eastern UP, a poor, caste-divided and gangster-ridden region, shows Indian democracy at its seamiest. Mirzapur is being contested by 27 candidates, including Ramesh Dubey, who held the seat for the BSP in the last parliament, and is now standing for Congress. In the 16 regional constituencies that polled this week, 272 candidates contested, of whom 17% had criminal records. The BSP's, SP's and BJP's were the most criminal: 44% of their candidates were tainted. The BSP also had the distinction of fielding a famous alleged gangster, Mukhtar Ansari, who stood for Varanasi from the prison-cell where he is awaiting trial for the murder of a BJP lawmaker.



A nearby BSP candidate and alleged gangster, Dhananjay Singh, got into hot water this week when he was accused of murdering a rival candidate, Bahadur Sonkar, who was found hanging from an acacia tree on April 13th. (Mr Singh, incidentally, is a high-caste Hindu; Mr Sonkar was a *dalit.*) Among the main parties, Congress had the cleanest contestants in eastern UP this week. Only a quarter were criminals.

For those who look to the two big parties to restore order to India's democracy, a 25% criminality rate is hardly the moral high-ground. And neither party looks likely to make great gains in this election. Between them, in 2004, they got just over half the available seats. According to several recent polls, this election may produce a similar result, with most foreseeing a narrow victory for Congress. At the invitation of President Pratibha Patil, Mrs Gandhi would then be expected to beg, borrow and buy the seats she would need to make a new parliamentary majority—with the irascible Miss Mayawati as her last resort.

Apparently Pivotal

Opinion polls have a poor record in predicting Indian elections, however, and Congress's fortunes remain perilously balanced. It has reasonable hopes of making some modest advances, including in Kerala and West Bengal, where the formerly-dominant Communists are flagging, and in Punjab, Rajasthan and Maharashtra. But Miss Mayawati, who according to Mahesh Rangarajan, a political scientist, could do Congress serious damage in 100 constituencies, may dash some of these hopes. More important, perhaps, Congress looks dangerously dependent on Andhra Pradesh (AP), where it won 29 seats in 2004. It will surely do worse there this time. The scale of its decline in AP could be the single biggest factor in determining the composition of India's next government.

If Congress can win roughly as many seats as the BJP, however, it does look better-placed to make the necessary alliances. In the run-up to this election, it rejected several possible partners, including the SP, at least partly as a declaration of its long-term hope for a national revival. But it could probably re-enlist these parties after the election, or find new allies. The BJP's case is different. Since losing power in 2004, it has been abandoned by most of its allies, including the Telugu Desam Party, or TDP, Congress's main rival in AP, and it is unclear whether they would return to it. Many, including the TDP, think they have lost crucial Muslim votes by associating with the Hinduist party. And the BJP's prime-ministerial candidate, L.K. Advani, is a well-known Muslim-basher, who spearheaded the Ram temple campaign in Ayodhya in 1992, which led to the mosque's destruction by vandals and hundreds of deaths in religious rioting.

On April 13th Mr Advani demanded an apology from Mrs Gandhi for needling him on another sensitive matter—his responsibility for freeing jihadist terrorists in a hostage exchange with the Taliban in 1999. Coming from a renowned political scrapper, this sounded rather desperate. Indeed, with a flailing leader, dismayed party and buoyant opponent, the Hindu nationalists are increasingly said to have no chance of regaining power. Then again, the same was said of Congress in 2004.

Banyan

The trouble with the king

Apr 16th 2009
From The Economist print edition

Nobody can say it in public, but the Thai monarchy, invisible during the latest crisis, is at its heart

Illustration by M. Morgenstern

SOMETHING of a hopeful trajectory was implied in *The Economist*'s report on the Friday coup of 1932. As Latin American countries replaced one junta with another, and as fascists moved Japan towards tyranny, our correspondent wrote (see article): “The Siamese revolutionaries are moving in the opposite direction—from absolute monarchy towards self-government.” Seizing power with no loss of life, a group of Westernised military officers had arrested the heir to the throne and the chief of police. The king had little choice but to accept the *fait accompli*: power was henceforth to devolve from an absolute monarchy to a parliamentary constitution. The feudal era was over.

If the correspondent had in mind something like the Dutch monarchy off shopping on their bicycles, in Thailand that vision got hijacked on the way to the supermarket. Today King Bhumibol Adulyadej, at 81 the world's longest-reigning monarch, has actually accrued power over the years, and remains central to Thailand's political chaos. This helps explain one bizarre episode among many in the country's latest crisis. At a time when large-scale bloodshed seemed possible as the army confronted anti-government “red shirt” protesters in Bangkok, Thaksin Shinawatra, the prime minister deposed in a coup in 2006, gave a television interview. His voice quaking with emotion, and doubtless recalling the king's famous televised carpeting of an army chief and a protest leader after a massacre in Bangkok in 1992, he beseeched “his majesty” to intervene again to end the showdown.

Yet Mr Thaksin, in exile and convicted in absentia of corruption, is accused by his opponents of being a closet republican. And he has indeed come close to criticising the palace, by demanding the resignation of two of the king's privy councillors, widely assumed to be behind the 2006 coup. When “yellow shirt” protesters laid siege to the government led by Mr Thaksin's loyalists late last year, they did so invoking the king's name. Yet now even Mr Thaksin felt obliged to profess again his loyalty to the king, and to pay homage to his power.

Such regal influence was far from preordained when the king came to the throne as a stripling, the American-born son of a half-Chinese commoner. He and his image were moulded by palace advisers and by successive military governments. They saw how useful it would be to have a figurehead depicted as not merely beyond reproach but very nearly divine, for the king's blessing could then legitimise what otherwise would look awfully like any old Latin American junta, in Thailand's case backed by business

cronies and the Bangkok elite. The need helps explain why a king held supposedly in wonder by his subjects warrants one of the world's most draconian laws against *lèse-majesté*. The king has been not just a figurehead for Thailand's elites, but a source of patronage and power in his own right, with destabilising consequences, especially now his reign is in its fumbling twilight. He has long bestowed honours in exchange for donations to his good causes. The causes may benefit his beloved rural poor, but the patronage system perpetuates royal influence.

Mr Thaksin's innovation was to use the impressively democratic constitution Thailand adopted in 1997 to invent a new politics that transformed the old system of retail, local, vote-buying into a wholesale machine that spread patronage nationwide. Policies of universal health care, microcredit and the like only strengthened the machine. Thus Mr Thaksin became the only prime minister in Thailand's fitful democratic history to serve out his full term. But the old elite felt threatened as his autocratic leadership and popularity seemed to challenge the king's authority.

Thai culture blends Buddhism, spirit beliefs and rampant materialism. Power and potency come in many fluid forms. But as Andrew Walker and Nicholas Farrelly of Australian National University put it, Thailand's elite is less conceptually adroit, calculating power in zero-sum terms. The junta that ousted Mr Thaksin claimed his policies flouted the king's notions of a "sufficiency economy", rooted in traditional notions of harmonious village life and perfect hierarchy, which they then incorporated into a new constitution. The junta, quickly making a mess of governing, allowed an election. But convenient court rulings helped bring down two successive pro-Thaksin governments.

Abhisit's chance

Mr Thaksin's wealth has been impounded. And his call, at the height of the crisis, for a revolution is now viewed by many Thais as criminally irresponsible. So Mr Thaksin is on the back foot. But the monarchy may be in deeper trouble. Some red shirts this week lamented that, if King Bhumibol is against the leader they keep voting for, he must be against them too. The king is old and frail. His successor, Crown Prince Vajiralongkorn—spoilt, oft-wed and demanding—is much disliked. The monarchy's carefully fostered image could crumble overnight.

Protecting it is partly the task of Abhisit Vejjajiva, Thailand's present prime minister. He rode to office, unelected, thanks to the yellow shirts. Mr Abhisit says he is a reformer, who will heal divisions. He handled the red-shirt chaos with firm restraint. The king, it is said, has taken rather a shine to the 44-year-old, schooled at Eton and Oxford. Our correspondent in 1932 would have put him firmly among the "rather exotic Westernised intelligentsia" in the post-coup government. He would doubtless have relished the paradox that such an urbane, cosmopolitan figure is now the front for a regime that in essence owes its power to a feudal monarchy. Mr Abhisit lacks both influence and legitimacy. To earn both, he will need to face the voters. Indebted to the royalists who brought him to power, he is unlikely to encourage debate on the monarchy's future. But if he did so, Thailand and perhaps the royal family itself would have reason to thank him in the long run. In its present role, the monarchy is standing between Thailand and not just political harmony, but modernity itself.

Correction: Pakistan

Apr 16th 2009
From The Economist print edition

Because of an editing error, last week's article on Pakistan, "The slide downhill", mistakenly attributed a comment by David Kilcullen to a report by the Atlantic Council, which he did not write. Sorry.

Piracy off Somalia

Perils of the sea

Apr 16th 2009
From The Economist print edition

The world's navies are trying to stop pirates. But will shooting them solve this growing maritime problem?

Reuters

AS SOON as they heard that Captain Richard Phillips had been rescued by the American navy—snipers had killed three pirates holding him at gunpoint on a lifeboat—the 19-strong crew of the *Maersk Alabama* whooped for joy. The cargo ship's horn hooted, flags were flown and flares fired to celebrate the release on April 11th of the skipper who had given himself up to win the release of his crew.

Two days earlier, French commandos had also been in action. They freed four of their compatriots, including a three-year-old boy, held hostage aboard a yacht, the *Tanit* (pictured above). One captive, Florent Lemaçon, was killed.

The United Nations' envoy to Somalia, Ahmedou Ould-Abdallah, said such stern military measures "are sending a strong message to the pirates and, more importantly, to their backers". But for the moment the strong message has been met with strong defiance. Some pirates said they would kill French or American sailors that fall into their hands. There is little sign, so far, that attacks have been deterred. Since Captain Phillips's release, at least four more ships have been attacked—two of them were captured in the Gulf of Aden, the area most closely patrolled.

Some 15-20 ships, ranging from bulk carriers to fishing vessels, along with about 300 sailors, are currently being held by Somali pirates. So far they have attacked ships for gain rather than out of ideology. They have almost always treated their hostages well while negotiating ransoms. But Vice-Admiral William Gortney, who commands American naval forces in the region, concedes that things could turn nastier as foreign navies resort to greater force. "This could escalate violence in this part of the world. No question about it," he says.

The combination of one of the world's busiest shipping lanes (20,000 ships a year pass through the Gulf of Aden) alongside the world's most utterly failed state makes the waters off Somalia the most prone to piracy. Ransoms of up to $3m make it an attractive profession. Money earned can go towards buying faster boats and fancier navigation equipment. Some captured vessels are used as "mother ships",

floating pirate bases from which speedboats can be launched against merchant vessels sailing hundreds of miles offshore. One was captured by the French navy on April 15th.

The International Maritime Bureau, a private-sector outfit, counted 111 pirate attacks off Somalia in 2008, nearly triple the previous year's number. That figure includes the capture of 42 vessels, among them the *Sirius Star*, a Saudi supertanker, and the *MV Faina*, a Ukrainian ship carrying tanks. So far this year, pirates have been more active but less successful. In 68 attacks they have captured only 18 ships, often small ones.

This is partly due to the presence of more foreign warships, including some dispatched by the European Union, NATO, an American-led coalition and by countries such as China and India wanting to protect their own vessels. However, their effect may be merely to shift the problem from the Gulf of Aden to the Indian Ocean.

President Barack Obama says America is "resolved to halt the rise of piracy". But how? Piracy off the Horn of Africa is of a different order from other maritime troubles, for example along the coast of west Africa where America is also busy (see article). Somali pirates operate up to 800 miles out to sea, loiter for weeks and even attack at night. There are now 20-odd warships patrolling 1.1m square miles (2.8m square km) of ocean off Somalia, two-thirds the area of the EU. "There is a lot of water out there. Twenty assets do not make much of an impact," says Commodore Tim Lowe, the British deputy commander of the American-led naval coalition. By one assessment, it would take about 140 warships fully to secure the Gulf of Aden, and several times that number to protect the seas off eastern Somalia.

So merchant ships are encouraged to look after themselves. Those making the 500-mile passage through the Gulf of Aden are told to stick to a designated "transit route" and to bunch up for protection in the most dangerous areas and times of day. In this way vessels, particularly slow ones with decks that are low off the water, can be "monitored" (but not escorted) by warships. Such measures have made it harder but not impossible for pirates to capture ships, particularly as some of them prefer to go it alone to save time (and money).

Some suggest protected convoys, but this would slow down shipping and require more warships than are available. Others propose arming merchant seamen, but that could provoke a spiral of bloodshed. For now, passive self-defence is generally the norm: barbed wire, fire hoses to try to push pirates away and, above all, an alert crew to spot attacks as early as possible to let the ship take evasive action.

One Western naval officer says placing all warships under a single command, say of the UN, and adopting the same rules of engagement would make the most of the existing forces. Hillary Clinton, America's secretary of state, suggests trying to freeze pirates' assets. In the end, as she acknowledges, the solution is not at sea but on land. Somalia needs a viable government to control its territory and shores. But that is a long way off. Western countries, after their experiences in Iraq and Afghanistan, are in no hurry to send soldiers to Somalia.

For now, merchant shipping's best friend may be the weather. The south-west monsoon begins at the end of May and blows until August or so, making life much harder for pirates. Let it blow soon.

Piracy in the Gulf of Guinea

A clear and present danger

Apr 16th 2009 | LAGOS
From The Economist print edition

The Americans are trying to fend off pirates in west Africa too

ON THE quayside of Nigeria's chaotic main port of Lagos, sailors from an American navy ship relax with a game of basketball at sunset. The USS *Nashville* and her crew of 420 are trying to make the sea safer in a region struggling not just with piracy but with drug smuggling, human trafficking and attacks by militants on oil-rigs and pipelines. Since January the 17,000-tonne amphibious transport ship has been a floating classroom, stopping off at five ports along Africa's western coast to help train local navies. An international team on board led by American service people and civilians have been teaching courses ranging from small-boat maintenance to anti-terrorism. The aim is to help Africa's navies monitor their own waters better.

They need all the help they can get. The Gulf of Guinea gets less attention than the waters off Somalia but is one of the world's most lawless stretches. From Senegal in the region's west, thousands of Africans brave the seas in dugout canoes for a chance to enter Europe illegally. The lucky ones wash up on Spanish shores but many others drown. Farther south, tiny Guinea-Bissau, with a largely unpoliced coastline and archipelago, is awash with traffickers taking drugs, mainly cocaine, from South America into Europe. Earlier this year, Equatorial Guinea accused militants from Nigeria's oil-rich Niger Delta of staging an attack on its capital, which lies on an island in the gulf.

Nigeria's maritime troubles mainly concern oil. Seaborne attacks on its facilities since 2006 have progressively cut Nigerian oil exports from 2.2m barrels a day to 1.6m or so today. Last year, in the most notable attack, militants in speedboats raided Royal Dutch Shell's main offshore facility, in deep seas off Nigeria, blocking off 220,000 b/d in a single raid. Experts on the *Nashville* have been training Nigerians in hand-to-hand combat and oil-platform protection, among other things.

Oil-rich west Africa is of growing strategic interest to America, which at the last count, in 2006, gobbled up over 40% of Nigeria's oil output. Though Equatorial Guinea, a former Spanish colony, began exporting oil only in 1995, it is already sub-Saharan Africa's third producer after Angola and Nigeria—and another growing supplier to America. Ghana, a close American ally, has also recently found oil.

The visit of the *Nashville* is part of the “Africa Partnership Station”, an international security idea promoted by America but including training teams from Europe. Spain, in particular, is keen to back plans to curb illegal migration. Italy, whose oil company Agip operates in Nigeria, is helping to train locals to protect oil platforms. The partnership predates but is now linked to Africom, an American military command headquarters devoted solely to Africa. But Africom is still based in Germany, because African leaders rejected requests by George Bush's administration to build a permanent military base and headquarters on the continent.

Egypt versus Hizbullah

They really don't like each other

Apr 16th 2009 | BEIRUT AND CAIRO
From The Economist print edition

Egypt accuses Lebanon's Hizbullah of spying against it

IN A sign of a deepening rift between differently aligned camps across the Middle East, Egypt's authorities claim to have busted a spy ring run by Hizbullah, Lebanon's Shia party-cum-militia, on Egyptian soil. Whereas Egypt has long claimed to lead the region's peacemakers, the Lebanese group is allied to a front which embraces Syria, Iran and Hamas, the Palestinian Islamist party ruling the Gaza Strip, and espouses confrontation with Israel. Exposure of an alleged Hizbullah cell feeds the fears of many Sunni Arab governments, as well as many of Lebanon's diverse people, that Shia Iran is using the group, which won prestige across the Middle East for parrying an assault by Israel in 2006, to extend its influence at their expense.

Egypt's state prosecutor has charged 25 people, including Lebanese, Palestinians, Sudanese and Egyptians, with forming a cell to smuggle weapons across Egypt's border with Gaza, to monitor shipping in the Suez Canal and to plot attacks against Egypt itself. Government-owned newspapers in Cairo say the cell, whose main operatives appear to have been rounded up in November, planned terrorist attacks on Egyptian resort hotels, targeting Israeli tourists with the aim of stoking general unrest and prompting a military coup. Other Egyptian press reports assert that a separate round of arrests in December netted four members of Iran's Revolutionary Guards, disguised as Iraqi Shia refugees.

This blaze of Egyptian accusations underlines the frustration felt by the government of President Hosni Mubarak, which has borne withering opprobrium due to its refusal to open crossings into Gaza to relieve the besieged Palestinian territory. Egypt's discomfort peaked during Israel's 22-day assault on Hamas in Gaza earlier this year, when Hizbullah's leader, Hassan Nasrallah, charged Mr Mubarak with complicity with the "Zionist regime" and dramatically called on Egyptian officers to save their country's honour. Egypt has remained isolated in Arab public opinion as Mr Mubarak has subsequently cracked down on cross-border smuggling and struggled to strong-arm Hamas into sharing power with its secular rival, Fatah, by using the opening of the border as a lure.

Some of Egypt's charges may be true. In a televised speech, Mr Nasrallah admitted that one of the arrested men was a party member engaged in logistical work to help "our Palestinian brothers". But the Hizbullah leader, who has a reputation for frankness, said that no more than ten of the alleged plotters had any link to his party, and denied any intent to harm Egypt. "If aiding the Palestinians is a crime, then I am guilty and proud of it," he said.

His deputy, Naim Qassem, said Hizbullah's people had clear instructions not to take any action against Israelis in Egypt. He posed a rhetorical question. "How can Israel have the right to receive weapons and intelligence from all the world, while one small effort to lift the oppression of the Palestinians or supply basic necessities to keep their struggle going is condemned?"

This logic still appeals to many in the region. But just as Mr Nasrallah's unsubtle call for Mr Mubarak's overthrow annoyed even some of the Egyptian president's foes at home, the revelation of Hizbullah intrigue raises questions about the group's intentions. Though implicated in past acts of international terror, Hizbullah in recent years has declared itself concerned solely with Lebanese affairs, increasingly so as Lebanon's general election due in June approaches. Its critics in Lebanon now have new cause to complain that the party risks enmeshing their country in regional squabbles they want no part of.

Congo's faltering economy

Too big to fail

Apr 16th 2009 | KINSHASA
From The Economist print edition

A collapsing Congolese state may be resorting to old-style brinkmanship

Eyevine

Fewer jobs for the boys

THE Democratic Republic of Congo was born into crisis and, for its nearly 50 years of existence, it has more or less stayed there. From a civil war that nearly destroyed the newborn nation in the wake of independence, it descended into decades of parasitic rule at the hands of a strongman, Mobutu Sese Seko. As he raided the coffers of state mining companies, the desperate and starving masses occasionally looted what was left of the country's rotting infrastructure. In 1994 inflation hit nearly 10,000%: small by today's standard in Zimbabwe, but enough to help end Mr Mobutu's rule three years later.

Now, after a decade or so recovering from it, Congo has again been brought to the brink of economic collapse, this time by the world recession. Resorting to some old-fashioned brinkmanship, however, its leaders may yet muddle through without being thrown out. After all, the Congolese have experienced much worse.

The slump in demand for Congo's bountiful minerals has been painful. In Katanga province, 300,000-odd miners lost their jobs virtually overnight last year, as copper and cobalt exports plummeted. In December, Congo slashed its estimate for this year's cobalt exports by more than half. The reality may be worse. Fewer people want diamonds. Direct foreign investment to Congo this year is likely to fall by more than two-thirds. The country's GDP growth may dive from 8% last year to less than 3%. The local currency has lost more than a third of its value since last year.

Since February the Congolese state has been virtually broke. Foreign donors are worrying that a decade of investment in stability, including costly elections in 2006 overseen by the UN's largest peacekeeping mission, may evaporate in a whirlwind of riots and army mutinies. "There's not enough money to pay salaries on time, to pay soldiers on time, to pay the costs of running a government," says a western diplomat in Kinshasa, the capital. "And I don't think any country has stability if these costs are not met."

It was therefore surprising that, far from tightening its belt as its reserves fizzled, the government should have been confident enough to embark on an expensive and inconclusive military campaign in January against foreign-backed rebels in the east. And yet, at a time when Congo seemed most in need and in the worst negotiating position, its government appears to have gained the upper hand in a row with foreign donors over a mining and infrastructure package worth $9 billion that was agreed a year ago with China. The IMF objected to it, on the ground that it would saddle Congo with a massive new debt, so is delaying forgiveness of most of the $10 billion-plus that Congo already owes.

China’s ambassador in Kinshasa has accused the IMF of blackmail. Though Chinese companies have yet to complete a feasibility study of the deal, they have begun infrastructure projects across the country. President Joseph Kabila thinks the agreement with China is the jewel in the crown of his otherwise drab economic policy. “No, we will not revisit this contract,” says the head of his special commission to oversee the Chinese deal. “The Congolese government is making sacrifices to benefit from debt relief, but it is also needs to renew its infrastructure.”

For the time being, Mr Kabila looks likely to get his way. In March, the IMF hastily disbursed nearly $200m to boost Congo’s foreign-currency reserves and maintain macroeconomic stability. The World Bank doled out $100m for teachers’ salaries and government utility bills. The European Union and the African Development Bank may chip in too, bringing total emergency aid to $450m or so, perhaps enough to tide Congo over until the end of the year.

What is more, Congo’s share of a general allocation of $250 billion in IMF special drawing rights approved at the recent summit of G20 governments in London may secure its foreign reserves for a year or two. This should allow Mr Kabila to limp along until 2011, when he is up for re-election. In the meantime fears are growing that he may be adopting the time-dishonoured technique of Mr Mobutu, who, as a cold-war ally, got billions in foreign aid from the West because, as he used to reckon, “you can’t afford to see us fail.”

France's president

Super-Sarkozy falls to earth

Apr 16th 2009 | PARIS
From The Economist print edition

A president who is surprised by the extent of his own unpopularity

Illustration by Peter Schrank

BY MOST measures, Nicolas Sarkozy ought to be having a good recession. Long before the crash came, the French president had called for an end to capitalist excess, appeals that were mocked at the time but now seem prescient. Tighter bank regulation and a more interventionist state *à la française* are both back in vogue. The government has not (yet) had to rescue any big French bank. French people are not personally much in debt. True, France's economy has been battered, but less so than most of its neighbours'. The Paris-based OECD expects GDP to shrink by 3.3% this year, compared with 3.7% in Britain and 5.3% in Germany. Yet French voters are in a volatile mood and Mr Sarkozy is surprisingly unpopular at home.

Indeed, the president's ratings slipped by another two points to 36% in April, according to TNS-Sofres's monthly poll. He got only a small boost after the G20 summit in London, even though the French press interpreted it as a Franco-German success. His numbers are hovering at a level far below the heights of popularity that he enjoyed during his first six months in office in 2007. In one recent poll, more respondents expressed confidence in the ability of the trade unions than of Mr Sarkozy to soften the impact of the recession. More crushing still, a poll this week that showed Mr Sarkozy shedding six further points placed at the top of its popularity list none other than Mr Sarkozy's predecessor, Jacques Chirac.

How to explain this? One reason is absolute economic performance. With the evening news every day reporting job losses and factory closures, it is little consolation for the French to learn that their economy is not shrinking as fast as Germany's. People may not have hefty mortgages or huge unpaid credit-card bills. But the impact of the global downturn is still being keenly felt. Unemployment is once again the voters' biggest concern; the jobless rate reached 8.6% in February, well above the European Union average. There is outrage that ordinary workers are paying with their jobs even as France has its own fat-cat pay scandals, such as the 180% salary rise, to an annual €1.3m, enjoyed by Jean-François Cirelli, a former government adviser who is now vice-president of GDF-Suez, an energy giant.

Voters gave Mr Sarkozy some credit for his initial handling of the financial crisis. But as recession has taken hold, disappointment has set in. They have trouble reconciling the image of their action-man president with his apparent impotence in the face of a global crisis. It is not for his want of trying. The president vowed to save a Caterpillar machinery factory in Grenoble and a Continental tyre plant in

Picardy; the government wants to keep Heuliez, a car-parts maker employing 1,000 workers, in business. Yet voters have grown wary of promises, partly because Mr Sarkozy makes more than he can keep. Last year, when Arcelor-Mittal announced the closure of part of a steel factory in Gandrange, in eastern France, he rushed to the scene and promised to keep it open—only for the company to close it anyway, with the loss of 575 jobs at the site.

Another explanation is that Mr Sarkozy no longer dominates international diplomacy in the way he did when France held the European Union presidency in the second half of 2008. The French liked the way their hyperactive president was constantly in the thick of diplomatic action, strutting from Georgia to the Middle East and making France count again in the world. Even now, polls show that voters approve of the way Mr Sarkozy defends French interests abroad, though most remain doubtful that he can do much to save jobs at home.

A further factor is a generally tense mood around the country. The voters do not blame this entirely on Mr Sarkozy, but it does not help to inspire confidence in him. That the French like taking to the streets, often being transported to their capital in coaches hired by unions, is hardly new. There have been two days of massive street protests and strikes this year, one drawing as many as 3m people across the country. For the first time on May 1st, Labour Day, all the main trade unions have called for a joint day of action.

The numbers can be impressive. But the government treats most organised, orderly protests as a normal, even useful, way to vent frustration. It is the hardening of more sporadic protests that has prompted greater concern. Examples include an outbreak of kidnapping—or “bossnapping”—of company bosses, held by workers in their offices overnight. Student protests have closed some universities, with lectures cancelled, for weeks on end. Fishermen this week blockaded the ports of Boulogne, Calais and Dunkirk with boats and barricades of burning tyres. None of these incidents is related. But they all seem legitimate in voters’ eyes: 64% of respondents to one poll say that the perpetrators, including bossnappers, should not be punished.

Above all, there is a worry that the slightest provocation could turn things much nastier. Henri Guaino, one of Mr Sarkozy’s aides in the Elysée, said on television recently that “the political risk is very high, the risk of violence, of revolt, is very great”. With a nod to the Jacquerie uprising of 1358, Nicolas Baverez, an economic commentator, calls this the *exception française.* France responds badly to economic shocks, he argues, partly because of a lack of civic institutions below the state. That helps to explain why direct action is so popular, and why protests become radical more quickly than in other countries.

The government is bracing itself for a difficult spring, the traditional season of French discontent. One consolation for Mr Sarkozy is that voters find the main opposition no more credible. The Socialists are as divided as ever, even under their new leader, Martine Aubry. Ségolène Royal, the party’s defeated presidential candidate in 2007, continues to prance about as if on the campaign trail. If any opposition party does well in the European elections in June, it will be François Bayrou’s centrists or Olivier Besancenot’s anti-capitalist hard-left group, not the Socialists.

There is perhaps one other crumb of comfort for the president. Mr Sarkozy may not be popular but he is still far above the depths plumbed by Mr Chirac. In 2006, as student protests spread around the country, Mr Chirac’s poll rating collapsed to a pitiful 16%. Mr Sarkozy has quite a way to go before he sinks that low.

Italy and Switzerland

A movable border

Apr 16th 2009 | ROME
From The Economist print edition

How global warming can shrink glaciers and alter frontiers

ONCE frontiers were changed by armies. Now the job is done by global warming. Italy and Switzerland are preparing to make—or rather to recognise—alterations to the border that runs through the Monte Rosa massif of the Alps. Despite what romantically minded locals may say, the name of the massif has nothing to with the pink blush its peaks acquire at sunset. It comes from a dialect word meaning glacier.

The massif has nine glaciers. In several places the line between the two countries is set at the watershed. Because of global warming, the glaciers have shrunk, so the watershed has shifted, "in some places by as much as ten metres", says General Carlo Colella of Italy's Military Geographic Institute in Florence. In January, after four years of work by the general and his staff, Silvio Berlusconi's cabinet approved a change in the frontier.

The line was first drawn in 1861 and enshrined in a convention 80 years later. The biggest change since came in the 1970s, when a stream that marked the border was diverted to allow construction of the Lugano-Como motorway. The two countries agreed a compensatory exchange of territory. The next Italian-Swiss agreement will be the second of three made necessary by the shrinking Alpine glaciers. Italy has already concluded a deal with Austria and plans to make another with France.

Recognising that global warming will make any line based on the watershed of a glacier temporary, the understanding with Austria has for the first time introduced the concept of a movable border. Experts from both sides will be empowered to alter it at regular intervals. Until, presumably, the glaciers disappear altogether.

Greece's troubled government

An Aegean fog

Apr 16th 2009 | ATHENS
From The Economist print edition

A bad economy and scandals are sapping the government's popularity

CAFES and bars in Athens are filling up as spring beckons and the memory of December's nasty riots fades. As the tourist season gets under way officials play down fears of renewed unrest. The message is that Greece was hit merely by a bout of hooliganism similar to post-match clashes between fans of the capital's rival football teams. Yet Athenians are sceptical, not least because the violence, though diminished, shows no sign of dying out.

Jittery Greek police officers blame self-styled anarchists, who played a big role in the December riots, for a spate of petrol-bombings of expensive cars, bank machines and government offices. A leftist terrorist group, Revolutionary Struggle, claimed responsibility for shooting a policeman in January. In early April two policemen from a rapid-reaction force formed after the riots were shot dead at close range during a late-night identity check, perhaps by east European gangsters.

Fears of public disorder add to existing worries over jobs and mortgages. Yannis Papathanasiou, the newish finance minister, claims optimistically that Greece can escape recession. But as forecasts keep being revised downwards, his mantra of growth above 1% in 2009 sounds less and less convincing. This week the central bank suggested that Greece may join the rest of Europe in recession. The unemployment rate has just hit 9.4%.

Tourism, which employs one in five Greeks, is suffering, partly because of a strong euro. The number of foreign holidaymakers on Greek beaches this summer may fall by 15-20%, say hoteliers. The British are heading for Turkey, where a weak pound is partly offset by a falling lira. Bookings by Russians, the fastest-growing market last year, are sharply down. "If there's a surge in late bookings, there's a slim possibility we can break even," says Nikiforos Lambrinos, a hotelier on Crete, glumly.

After 15 unbroken years of growth at around 4% a year, Greeks are not used to belt-tightening. But Mr Papathanasiou cannot offer even a modest fiscal stimulus. The cost of financing a public debt standing at 94% of GDP has risen since Greece's credit rating, like Spain's and Portugal's, was downgraded in January. The budget deficit is already over the theoretical ceiling of 3% of GDP for euro-area countries.

A record of fudging budget numbers gives Greece little credibility in Brussels. The European Commission has demanded more reforms to keep the deficit below 3% in 2010. Mr Papathanasiou has already announced unpopular measures, including a wage freeze for civil servants and a one-off tax for high earners. More spending cuts are on the way. But structural reforms such as modernising the health-care and pension systems remain stuck.

The gloomy atmosphere is taking its toll on Costas Karamanlis, the prime minister, and his conservative New Democracy party. Last month Mr Karamanlis marked his fifth anniversary in the job by telling a journalist he felt "exhausted" and might step down if New Democracy loses the election that may come next year or even sooner. With only a one-seat majority in parliament, the party trails the opposition Socialists by over seven points, say polls.

Corruption scandals still beset the government. This week a former director of Greece's competition watchdog was convicted of bribe-seeking. A former minister, Aristotle Pavlidis, is accused of involvement in a bribery scandal over subsidised ferry routes. Mr Pavlidis, who insists he is innocent, has resisted pressure to resign from parliament. Disgruntled conservatives fear that, as Mr Karamanlis and his government focus on anarchists and fiscal discipline, their grip on power is slipping.

The German economy

Clunk-clicked

Apr 16th 2009 | BERLIN
From The Economist print edition

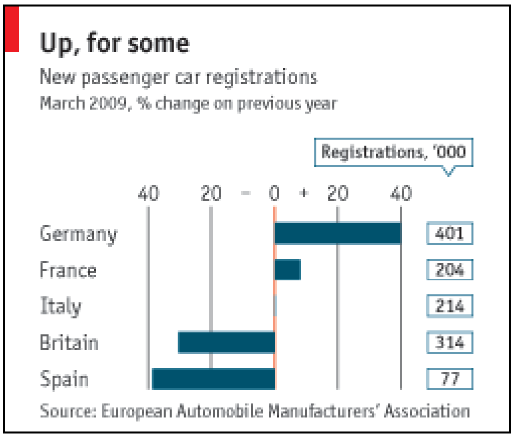
Germany's cash-for-clunkers scheme shows some readiness to spend

ARE Germany's leaders stubborn penny-pinchers, oblivious to the financial crisis and the urgent need for more fiscal stimulus? This was the charge when Chancellor Angela Merkel teamed up with France's Nicolas Sarkozy to resist pressure to do more at the G20 summit in London. Or are they reckless spendthrifts, wasting billions on schemes that boost their popularity but do little for the economy? Such was the complaint on April 8th, when the grand coalition between Ms Merkel's Christian Democratic Union (CDU) and the Social Democratic Party (SPD) more than tripled the amount available for its cash-for-clunkers scheme, which gives Germans a €2,500 ($3,330) handout to scrap their old cars and buy new ones.

The government had set aside €1.5 billion for this, as part of a stimulus package worth €50 billion in February. But the offer "zeroed in on the German soul", as one newspaper put it. By early April, 1.2m had applied to take it up, twice as many as expected. Ms Merkel, facing an election in September, is in no mood to disappoint them. Nor is her SPD challenger, Frank-Walter Steinmeier, the foreign minister. So they threw an extra €3.5 billion into the pot, which now has enough in it to please 2m car-buyers.

This has lit the economic gloom with a rare flash of euphoria. In March car sales had jumped by 40% from March 2008, to the highest level since the boom after unification, putting Germany far ahead of other countries (see chart). The frenzy is mainly for small cars, the sort that drivers of decade-old clunkers most like to buy.

But fretting about debt and inflation is equally characteristic of the German soul. Many commentators have criticised the scrapping bonus. Singling out one industry for subsidy, even if it accounts for 20% of industrial production, is economically dubious. The bonus may rob sales from other deserving industries, from white goods to beer—as well as from future car sales. In France, which offered a scrapping bonus in the mid-1990s, sales slumped by 20% in the year after its expiration.



The small-car bias means foreign carmakers benefit more than German ones. In March domestic producers captured just 36% of the bonus bounty, even though their normal market share is over 60%. Germany wins brownie points for upholding Europe's single market. But the scheme will do little for the likes of Daimler, which is contemplating layoffs, or Karmann, a supplier that has just filed for bankruptcy. Car production, which depends heavily on exports, has dropped to its lowest in 15 years. Writing in *Handelsblatt* newspaper, Ferdinand Dudenhöffer, an industry analyst, calls the cash-for-clunkers results "anything but exhilarating".

But ex-clunker drivers' elation is boosting the business climate overall, argues Ulrich Kater, an economist at DekaBank in Frankfurt. Production should pick up once carmakers clear their stocks of unsold cars. In Berlin sales of French-built Peugeots have tripled. Yet Christian Spreigl, head of local distribution, is not worried about a post-bonus slump. He says 85% of recipients are buying a new car for the first time, trading in one bought second-hand.

That is stimulus enough for now, says the government. The tax cuts and extra spending in its two stimulus packages add up to 1.4% of GDP this year, reckons Bruegel, a think-tank in Brussels, well above the total European average of 0.9%. America's stimulus is worth 2% of GDP, but that does not account for "automatic stabilisers" like unemployment insurance, which are more generous in Germany.

Nonetheless, the buzz over a further stimulus will not go away. A subsidy for workers who have had their hours reduced could be extended from 18 to 24 months. There is talk of state-supported "transfer

companies” where employers could temporarily park unneeded workers. Corporate tax might be cut. Plenty of politicians in Berlin insist there will be no new stimulus. But by doling out more cash for clunkers the government seems more afraid of voters than of debt.

Croatia and Europe

A Balkan state in balk

Apr 16th 2009 | ZAGREB
From The Economist print edition

Hopes of early European Union accession recede in Croatia

WHEN Albania and Croatia formally joined NATO at the beginning of April, Albanians celebrated with gusto. They intend to follow this up before the end of the month by seeking the status of a candidate for European Union membership. By contrast, glum Croatia did little more than issue a NATO postage stamp. Beset by bad economic news—Goran Saravanja, the chief economist of Zagrebacka Banka, predicts that in 2009 GDP will shrink by 3.7% and unemployment will rise sharply—and by reverses on the path towards EU membership, most Croats were unmoved by NATO accession.

What a difference from the time when Ivo Sanader, Croatia's prime minister, was elected to a second term in 2007. Then the economy was booming and EU accession talks were progressing at a clip. Now, thanks to objections from Slovenia, they have come to a halt. The Croats still hope to join the EU in 2011, but unless Slovenia gives ground in the next few months, any chance of meeting that date will vanish.

The Slovenes are blocking Croatia's EU negotiations because they want a settlement to a long-running border dispute over a tiny bay named Piran. Croatia wants the matter settled by the International Court of Justice, but Slovenia does not. Olli Rehn, the EU's enlargement commissioner, suggested arbitration on March 25th. But neither side has accepted this proposal.

With local elections due on May 17th and a presidential campaign starting by the end of 2009, the Croatian government is in no mood to compromise. Some officials hope the pressure may start to build on Slovenia instead. Concessions offered by the EU to the Irish to secure a yes vote to the Lisbon treaty this autumn could be enshrined legally in Croatia's EU accession treaty, which has to be ratified by all existing members. If so, a Slovene veto would obstruct the entire EU, not just Croatia.

For now, standing up to Slovenia is helping to distract attention from a string of corruption scandals and a worrying number of gangland-style killings that have shocked public opinion. Croatia is plagued by corruption, notes one commentator, Denis Kuljis, who adds ruefully that the public do not grasp the links that exist between gangsters and some in the political elite.

Even without the Slovene problem, the Croats have a lot still to do to satisfy Brussels. One big difficulty will be a reform of shipbuilding, which employs as many as 17,000 people, but survives only with huge subsidies. Other profferings of public largesse designed to sweeten voters before the local elections are also causing trouble. Many economists said the government could not afford the public-sector wage rises

of 6% it announced in January. Now deteriorating public finances have forced a humiliating reversal of the decision. The IMF has joined critics in arguing that Croatia must shrink its public sector.

If there is any good news, it is that Croatia may weather the financial crisis better than some of its neighbours. In March Mr Sanader began to mend fences with Serbia, with which relations have been poor. In former Yugoslav times, millions of Serbs would come to the Croatian coast every summer. Comparatively few do so now. Yet if one of Mr Sanader’s hopes from better relations was to avert a bad year for Croatian tourism, he may not have done enough. Today many Serbs prefer somewhere like Turkey, not because they fear that a Croat with a wartime grudge may smash their windscreen, but because it is cheaper. No wonder an air of despondency hangs over Croatia.

A correction was made to the map on this article on April 17th 2009.

Protests in Moldova and Georgia

Street scenes

Apr 16th 2009
From The Economist print edition

Moldova's crackdown, like Georgia's standoff, leaves protesters fuming

IDEALISTIC youngsters demanding their country's faster integration with Europe were a rarity even before the Moldovan authorities beat and jailed hundreds, and killed two, after a spree of protests against electoral fraud. But the limp European Union reaction to the crackdown will not encourage others to follow in their footsteps.

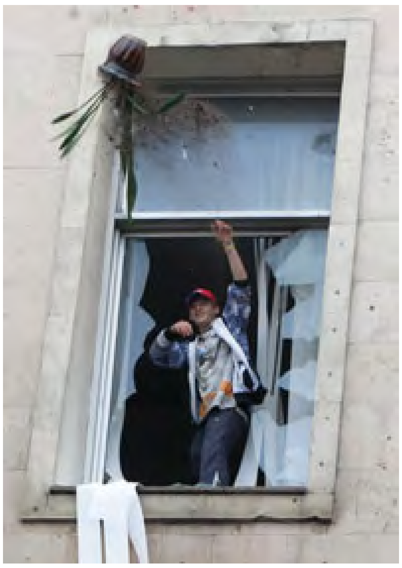
Few emerge with credit from the protests. Some participants rioted, storming and burning public buildings. The opposition parties loosely linked to the protesters are a lightweight lot with some questionable leaders. What unites them is anger over alleged ballot-rigging in the April 5th parliamentary election. The ruling Communists (in reality, a centre-right party) would probably have won even without bullying their rivals, skewing media coverage and inflating voter lists. With half the vote, they took 60 of the 101 seats in the unicameral parliament. This week, the government began an election recount.

Although the government consists mainly of competent technocrats, the crisis has shown that real power lies with President Vladimir Voronin, who is due to step down soon, and his cronies. The official reaction was striking, both in its brutality and in the contempt it showed for the EU, a large donor to Moldova, Europe's poorest country. The authorities barred Western diplomats from visiting detainees. A limited UN-led investigation of 90 people in one jail found evidence of severe beatings and "inhuman" conditions. The corpse of Valeriu Boboc, a 23-year-old protester, was returned to his parents covered in bruises; the authorities say he was poisoned. A Moldovan journalist, Natalia Morar, is under house arrest. Amnesty International is championing her cause.

On April 15th Mr Voronin called unconvincingly for an amnesty for the protesters. In fact he blames foreigners, particularly Romania, which before the war included most of present-day Moldova. A vocal minority in Moldova wants reunification, partly for nationalist reasons and partly to speed up progress towards entry into the EU. The Romanian president, Traian Basescu, has ordered an acceleration in the issue of passports to Moldovans. The mutual hatred between him and Mr Voronin (who sees dual citizenship with Romania as treason) is intense. Moldova has brought in visas for Romanians, expelled the Romanian ambassador and stopped Romanian journalists entering the country. The (Latvian-born) director of the National Democratic Institute, an American outfit, faces deportation.

The EU is quietly trying to act as an intermediary, but some diplomats say its intervention could make things worse. Russia is dangling a deal over Moldova's most industrialised region, Transdniestria, whose separatist regime it sponsors. This is meant to encourage Mr Voronin to lean east. Against this background, Moldova's pro-Western camp finds the EU's reaction to the attack on the protesters spineless.

Reuters



Protester, with a plant

The feeble international response to the behaviour of the Moldovan authorities contrasts with events in another ex-Soviet republic, Georgia. Opposition demonstrators there have been demanding the resignation of President Mikheil Saakashvili. Having blundered in a heavy-handed crackdown against similar protests in November 2007, the Georgians handled this week's demonstrations with punctilious attention to outside opinion. That cuts little ice with the opposition, which believes that Mr Saakashvili is authoritarian, nepotistic and incompetent. The main evidence for this last charge is his disastrous war with Russia last summer. But by ex-Soviet standards, Georgia's economy is strong and its political system free and open.

The Georgian opposition has several heavyweight ex-allies of Mr Saakashvili. They include a former speaker of parliament, Nino Burjanadze, a former foreign minister,

Salome Zourabichvili, and a former ambassador to the United Nations, Irakli Alasania. Even if they squabble, that is a galaxy of talent compared with Moldova. Many of Georgia’s foreign well-wishers are fed up with the erratic behaviour of the president. But for now at least most Georgians prefer imperfect stability to revolutionary upheaval.

Charlemagne

Dragon nightmares

Apr 16th 2009
From The Economist print edition

The European Union finds it hard to agree over how to deal with China

Illustration by Peter Schrank

HERE is a quick way to spoil a Brussels dinner party. Simply suggest that world governance is slipping away from the G20, G7, G8 or other bodies in which Europeans may hog up to half the seats. Then propose, with gloomy relish, that the future belongs to the G2: newly fashionable jargon for a putative body formed by China and America.

The fear of irrelevance haunts Euro-types, for all their public boasting about Europe's future might. The thought that the European Union might not greatly interest China is especially painful. After all, the 21st century was meant to be different. Indeed, to earlier leaders like France's Jacques Chirac, a rising China was welcome as another challenge to American hegemony, ushering in a "multipolar world" in which the EU would play a big role. If that meant kow-towing to Chinese demands to shun Taiwan, snub the Dalai Lama or tone down criticism of human-rights abuses, so be it. Most EU countries focused on commercial diplomacy with China, to ensure that their leaders' visits could end with flashing cameras and the signing of juicy contracts.

Meanwhile, Europe's trade deficit with China hit nearly €170 billion ($250 billion) last year. China has erected myriad barriers to European firms, notes a scathing new audit of EU-China relations by the European Council on Foreign Relations (ECFR), a think-tank. The trend is ominous. In five years, China wants 60% of car parts in new Chinese vehicles to be locally made. This is alarming news for Germany, the leading European exporter to China thanks to car parts, machine tools and other widgets.

As ever, Europeans disagree over how to respond. Some are willing to challenge China politically—for example, Germany, Britain, Sweden and the Netherlands. But they are mostly free traders. That makes them hostile when other countries call for protection against alleged Chinese cheating. In contrast, a block of mostly southern and central Europeans, dubbed "accommodating mercantilists" by the ECFR, are quick to call for anti-dumping measures. But that makes them anxious to keep broader relations sweet by bowing to China on political issues.

The result is that European politicians often find themselves defending unconditional engagement with China. The usual claim is that this will slowly transform the country into a freer, more responsible stakeholder in the world. The secret, it is murmured, is to let Europe weave China into an entangling web of agreements and sectoral dialogues. In 2007 no fewer than 450 European delegations visited China. Big countries like France and Britain add their own bilateral dialogues, not trusting the EU to protect their interests or do the job properly. There are now six parallel EU and national "dialogues" with China on

climate change, for example.

Alas, familiarity with Europeans does not preclude contempt. EU-China dialogues on human rights or the rule of law are a way of tying Europeans down with process, avoiding substance. China abruptly cancelled an EU-China summit scheduled for last December. The astonishing snub was presented by Chinese diplomats as punishment for France's Nicolas Sarkozy for meeting the Dalai Lama when his country held the rotating presidency of the EU (with other EU countries left to take note).

Chinese interest in the EU peaked in 2003, when it looked as if the club would soon acquire a constitution, a foreign minister and a full-time president. But the honeymoon had ended by 2006, after China failed to get the EU to lift an arms embargo imposed after the Tiananmen Square killings of 1989. At policy seminars and closed-door conferences, state-sponsored Chinese analysts now drip condescension. America is a strong man and China a growing teenager, said one at a 2008 conference in Stockholm; Europe is a "rich old guy", heading for his dotage. At a recent Wilton Park conference in Britain, a Chinese academic called the EU a weak power, unprepared to challenge American hegemony: China was not about to work with it on a new world order.

Unity meets disunity

If you wanted to design a competitor to show up European weaknesses most painfully, you would come up with something a lot like China. It is a centralised, unitary state, which is patient and relentless in the pursuit of national goals that often matter more to the Chinese than anyone else. European governments do not even agree on what they want from China. They are fuzzily committed to EU "values", but will readily trample on those in a scramble to secure jobs and cheap goods for their voters. They do not share the same vision of trade policy, or how best to press China on climate change. Worse, the biggest countries, especially France, Germany and Britain, compete to be China's favourite European partner. This causes damage. It was mad that the British and Germans did not rush to back Mr Sarkozy when he was bullied over the Dalai Lama. They could easily have insisted that EU leaders meet whomsoever they want.

Yet talk of a "Chi-merican" G2 running the world is overblown. For one thing, China will probably prefer to keep its own global options open. For another, senior Brussels figures rightly insist that the EU's voice cannot be ignored in global economic discussions. It is China's largest trading partner, after all, with two-way trade worth a huge €300 billion.

Ideally, European governments would be less feeble and fractious. Failing that, Europe could set itself more modest goals. Chinese officials are reportedly fascinated by European welfare and public-health systems, as well as by EU product regulation. Providing a model for red-tape or welfare reform may not be as much fun as jointly running a multipolar world. But with its pathetic record of handling partners such as China, Europe should welcome recognition of its relevance, however it is offered.

Economist.com/blogs/charlemagne

Pakistan and Britain

The immigration superhighway

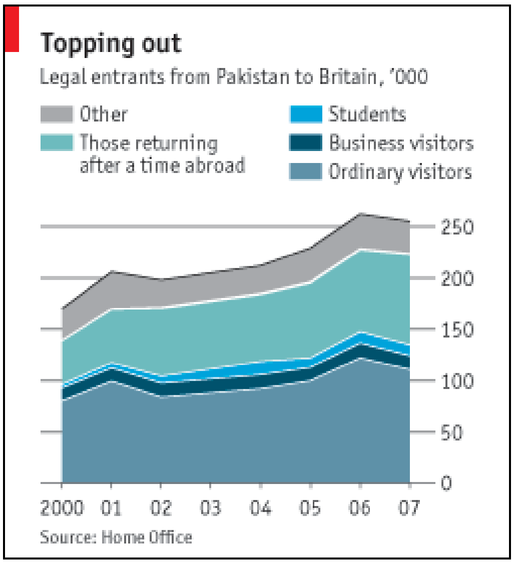
Apr 16th 2009 | BRADFORD
From The Economist print edition

Another alleged terrorist link to Pakistan draws attention to a busy path on the world's migration map

AP

IT IS midnight outside Mecca, and a crowd has gathered to pay homage. Their devotion is intense, but not religious: the "Mecca" in question is a bingo hall in Bradford, and the god being worshipped by a group of young, white Bradfordians appears to be alcohol. Nearby, in one of the city's Pakistani neighbourhoods, pubs have shut for lack of custom. Only a few streets away, it seems a continent apart.

One reason why shop signs on the streets of Bradford are still written in Urdu, half a century after the first Pakistanis came to Britain, is that population flows between the two countries remain large (see chart). Each year 250,000 Pakistanis come to Britain to visit, work or marry, and some 350,000 British citizens journey in the opposite direction, mainly to visit family. Links are reinforced by ingrained marriage customs: six of ten ethnic Pakistanis in Britain pick a spouse from Pakistan.



Those busy borders have been a boon in various ways. British universities rake in around £10,000 ($15,000) per person from their share of the 10,000 or so Pakistanis admitted each year on student visas, and businesses sponsor a couple of thousand Pakistani workers a year to plug gaps in the labour market. But the easy comings and goings between Britain and "the most dangerous place in the world", as President Barack Obama recently dubbed Pakistan's western regions, is causing concern. On April 8th British police arrested 12 men on suspicion of involvement in what officers say was a "very, very big" terrorist plot. Ten were Pakistani citizens on student visas.

No one yet knows if the alleged plot was the real thing. Previous raids, hyped by the police before turning out to be false alarms, have instilled caution in a plot-weary public. But even if the photographs of shopping centres said to have been found at the men's addresses were holiday snaps rather than battle plans, the porous border between Britain and Pakistan is frequently abused. In December Gordon Brown

said that three-quarters of domestic terrorist plots being monitored by MI5 had links to Pakistan. After the recent arrests the prime minister repeated that “Pakistan has got to do more to root out the terrorist elements in its country.”

This drew a scornful response from Pakistan’s high commission in London, not least because the raids were compromised by a senior British policeman who clumsily flashed plans of the arrests to a bank of photographers, forcing the operation to be brought forward by a day. And not everyone in the government agrees that Islamic radicalism is the fault of Pakistan alone. Sadiq Khan, the minister for community cohesion, said that on a recent trip to Pakistan he had encountered anger at attacks by unmanned American drones. “The view they [students] had was that the UK was somehow responsible for this…They lumped us together with the US,” he said.

Wherever blame lies, in Britain more responsibility for the behaviour of visa-holders is being shifted on to the shoulders of those who sponsor them. Under rules that came in last month, employers and colleges must join an official register to sponsor work or student visas. The Home Office has reported that 460 of the 2,100 schools and colleges which sought to do so were rejected. Most universities support the change, since weeding out bogus colleges should benefit the rest.

Would-be terrorists will now have to scrape together the grades to get into a real college. That may not be too hard. But from the autumn the government wants universities to check up on suspicious behaviour, reporting foreign students who seem to have dropped out to the UK Borders Agency. Some lecturers, including those who work at a university raided on April 8th, are threatening a boycott.

The heaviest flows of human traffic between Britain and Pakistan, however, are within families. Ann Cryer, the MP for Keighley, a town near Bradford with a large Pakistani population, reckons that as many as 80% of Muslim marriages in the area are transcontinental. This may reflect a cultural preference but it is also “a way of getting around immigration controls”, Ms Cryer says. For a goatherd in Mirpur, “marrying a cousin in Keighley is a leg-up”. Elderly parents can be shipped over later.

Only a minority of these marriages are forced, most people agree. British-born men are willing to marry Pakistani girls to stay in their parents’ good books; in any case, some carry on relationships with a local woman. British girls are less keen, but local Muslim men are in short supply owing to their own Pakistani marriages. Many people hotly dispute that there is a problem; Ms Cryer is angling for white votes, they say. On the contrary, she retorts, many of the loudest critics of such marriages are women whose foreign grooms filed for divorce once in Britain, often then bringing their real partners over from Pakistan.

Recent changes have tightened the conditions for marriage visas. Since November both partners have had to be 21 years old, up from 18 (and, a few years ago, 16). This will at least give British brides the chance to get the prerequisites for financial independence under their belts. The Home Office has said that it wants to require foreign spouses to speak English too.

These measures may help to stop what appears to be an increasing trend. Alan Manning and Andreas Georgiadis of the London School of Economics crunched data to show that British-born Pakistanis, or those who immigrated as children, are more likely to have foreign spouses than those who came to Britain as adults.

This startling fact may help to explain why Pakistanis (and Bangladeshis, who have similar marital habits) are failing to close the gap with other ethnic groups on female employment. Only a quarter of ethnic Pakistani women work, compared with 64% of Indians, for example. Mr Manning thinks something has to give: British women have greater earning power than their Pakistani husbands, which makes traditional roles in the home less plausible. In some cases, extremism may stem in part from male frustration that the old order is being subverted, he speculates.

For Ms Cryer, radicalisation is less important than the conditions in which many of her constituents live. “Parents who arrange marriages like these are holding the whole community back. They’re not just importing cousins; they’re importing poverty.” And that, in the long run, may prove a bigger Pakistani threat to Britain than extremism.

Police brutality

The camera is mightier than the sword

Apr 16th 2009
From The Economist print edition

Mary Poppins's best friend assaulting demonstrators

AP

Plods and kettles have their way

DESPITE the threats to destroy capitalism and hang the bankers, the real hero of London's G20 demonstrations on April 1st may turn out to be an American fund manager. The anonymous capitalist accidentally filmed a policeman assaulting Ian Tomlinson, a newspaper vendor who was making his way home through the protest. Mr Tomlinson was clubbed from behind with a baton and shoved to the ground as he walked away from a line of officers, hands in his pockets. He subsequently died of a heart attack.

Just as the shock of that footage was receding, another video nasty emerged. In it a woman at a vigil for Mr Tomlinson on the following day is slapped and baton-thwacked by a different officer. The Independent Police Complaints Commission (IPCC) is now investigating both cases. Given that most of the 5,000-odd protesters had cameras, more may well emerge.

It is especially dismal that the police should be so shamed in this of all weeks. On April 15th Britain marked the 20th anniversary of the Hillsborough disaster, perhaps the deadliest ever police cock-up. Ninety-six Liverpool fans were crushed to death at a football match, after police allowed spectators to pour onto a crowded terrace. The episode led to sweeping reforms: these days, other countries' finest visit Britain for tips on football policing.

It is time those lessons were applied elsewhere at home: the expertise gleaned from football crowds deserts British coppers dealing with political ones. No one can sensibly claim that Britain's police are as brutal as many, probably most, other countries'. Some will argue that more dangerous security threats require more robust responses. Police tactics are nonetheless seriously flawed.

As at previous demos, the police at the G20 "kettled" or corralled thousands of mainly peaceful protesters (and not a few passers-by) into a central area that they were not allowed to leave for hours, without access to food, lavatories, insulin or anything else they pleaded for. Such detention without arrest (for such it effectively is) was quietly approved by the law lords in January, when they upheld a ruling that police had acted legally in detaining several thousand people in similar circumstances in 2001. As long as measures were proportionate, there was no breach of the right to liberty.

Whether the measures were sensible is another question: many mild-mannered G20 folk heated up after a few hours in the "kettle". The police know perfectly well that the prospect of kettling puts people off exercising their right to peaceful protest. A review of crowd-control tactics ordered on April 15th should think hard about its use in future.

Other things too need attention. Bad apples of the sort now starring on YouTube are seldom brought to

justice: no policeman has ever been convicted of murder or manslaughter for a death following police contact, though there have been more than 400 such deaths in the past ten years alone. The IPCC is at best overworked and at worst does not deserve the “I” in its name. And 20 years on, no one has yet been held responsible for the Hillsborough disaster.

Helping carmakers

Underpowered

Apr 16th 2009
From The Economist print edition

Manufacturers are vexed by half-baked offers of help

IN A good year Britain turns out 1.5m cars and its inhabitants buy 2.5m. This is not a good year. Local manufacture was down 60% in February and sales fell 30% in March, compared with a year earlier. In some ways that is the inescapable reality of the business cycle. But most governments in Europe have fought the trend by pouring easy credit into their auto manufacturers, and bribing people to scrap their old cars and buy new ones. Germany, for example, will give you €2,500 ($3,330) if you trade in your nine-year-old car for a new one (see article).

Not so in Britain. Its car industry is globally important, along with its aerospace and pharmaceuticals giants, but its big car firms are all in foreign hands. Tata of India owns Jaguar Land Rover (JLR); the iconic British Mini is in the hands of German BMW; and America's GM owns Vauxhall, which makes Britain's second-most-popular car. Three Japanese firms—Honda, Toyota and Nissan—also have big plants in Britain. All have been cutting shifts and production recently. Carmakers employ around 180,000, and give employment to another 620,000 in support and supply. But a government faced with this patchwork does not necessarily think that it should be the one to mount a rescue.

Hence the months-long wrangling with Tata over who should put money into JLR to tide it over. Tata wants to borrow around £500m ($750m), but since the banks will not lend on their own it needs a partial government guarantee. In the meantime the European Investment Bank has agreed to lend £340m to JLR and another £370m to Nissan's British and Spanish operations, specifically for "green" car projects, also against an official guarantee.

But that is the only commitment so far from a British government that in November made positive noises about supporting the industry. Other measures discussed, such as introducing a car-scrapping subsidy, supporting workers on short time and improving car companies' access to finance, have reached no conclusion. Early hopes that the Bank of England might buy bundles of car loans, as part of its plans to expand the money supply, were dashed on March 23rd: the central bank is wary of dealing with non-bank car-finance firms.

Car scrapping looks a good way to help carmakers in principle—German car sales surged 40% in March and French ones rose too—but it is not so obvious a panacea in Britain. Only 22% of the cars produced in Britain are sold there and only 14% of those bought in Britain are made there, so a scrapping scheme would mostly benefit firms abroad. The Society of Motor Manufacturers and Traders sees it differently: the British motor industry supplies many of the components in those foreign cars, it argues. A boost in sales would please dealers, too, and encourage banks to relax their tight credit terms for dealers and suppliers.

Even if a scheme is introduced, as some expect, in the April 22nd budget or soon after, do not expect a German *Sturmflut*: the average age of British cars is seven years, whereas that of German cars is eight-and-a-half. More promising may be mooted government support for credit insurance. If the scheme followed the French model, it would top up credit-insurance limits, slashed by insurers for many firms since October, for a premium of 1.5%. Insurers could still refuse to cover a company altogether, but it might remove a big barrier to bank lending, not only to carmakers.

Perhaps the manufacturing base, small and largely foreign-owned in Britain, seems a less obvious candidate for state support than it does in other countries. But there are reasons, not least environmental, why the government should not seek to bail out carmakers in their existing form even if it could. Plans aired on April 16th to subsidise buyers of electric cars from 2011 make sense, despite the current limitations of that technology. British carmakers come late to the market but, in a positive sign of things to come, Nissan announced on March 20th a partnership with One North East, a regional-development agency, that may lead to the production of electric cars at Nissan's Sunderland plant.

Housing market

A turning point of sorts

Apr 16th 2009
From The Economist print edition

Activity may be starting to pick up but prices have further to fall

AFTER an extraordinary slump, things may at last be starting to turn up in the housing market. But anyone hoping for a return to the glory days stands to be sadly disappointed.

New evidence pointing to a pick-up in the market came from the Royal Institution of Chartered Surveyors (RICS), in its monthly survey of estate agents published on April 15th. This showed a net balance of 31% reporting more, rather than fewer, new potential buyers in March—the highest since September 2003, and the fifth month running that the balance has been positive (see chart). The finding buoyed the pound, which touched a three-month high of $1.50.

There may be more buyers on the prowl but if they are to make actual purchases most will need mortgages, which have been hard to come by during the credit crunch. That may be changing: according to the Bank of England the number of loans approved for house purchase rose in February. Banks are planning to increase their mortgage lending over the next three months, whereas for more than a year they have been intent on cutting it. This suggests that the rise in new-buyer inquiries may indeed lead to more home loans—the usual pattern before the credit crisis.

Yet if the housing market is showing renewed signs of life, it is from a malaise unimaginable before the credit crunch. As Simon Rubinsohn, chief economist at RICS, says: "It looks like a turning point in activity, but from an abysmal low, and conditions will remain far from normal, particularly for first-time buyers."

In particular, hopes that house prices may now stabilise are likely to be dashed. A net balance of 73% of the estate agents reported that prices were falling rather than rising in March. That may be less dire than the record 94% in April 2008, but it remains one of the bleakest readings in the 30-year history of the survey.

This is hardly surprising. Although prices have dropped sharply, houses are still overvalued in relation to household income. Prices were weak for three years after the recession of the early 1990s, even though loans for house purchase averaged around 80,000 a month—double the most recent figure. Some areas may do better than others: posh London pads may be attractive to foreign buyers lured by the cheap pound. But the overall outlook for house prices is still poor.

Student prospects

Pity the young

Apr 16th 2009
From The Economist print edition

No jobs, and a scrum for university and college places

IT IS hard to imagine a worse time to be entering the world of work. Youngsters leaving school and university this autumn will face competition from a good part of the class of 2008, who are still searching for jobs, as well as from more experienced workers who have recently been made redundant. Hiring freezes favour those already in work over would-be entrants. The most recent figures from Eurostat, the European statistics agency, suggest that youth unemployment, for many years low in Britain, is now higher than the euro-area average. According to the Association of Graduate Recruiters, its members expect to be taking on 5% fewer recruits this year than last, and starting salaries are frozen.

So rational youngsters are turning to delaying tactics, and sixth-form colleges and universities are seeing a boom in demand. Despite a demographic decline in the number of 16-year-olds, sixth-form colleges expect up to 35,000 more students this autumn than last. Applications to universities are up by 34,000, or nearly 8%.

The government has worked to get young people studying longer. It has raised the compulsory school-leaving age from 16 to 18, to take effect in stages over the next few years, and wants half of all school-leavers to go on to university. But just as its aims seem within reach, worsening public finances are getting in the way. Earlier this month sixth forms learned, to their incredulity, that they would be receiving less government money this autumn than last. Universities have been told to cut back too, with already-stingy plans to cover 15,000 extra undergraduate places cut to just 10,000. This is to plug a £200m funding shortfall caused by the government’s decision in 2008 to extend means-tested grants to students from better-off families.

Teachers fear that, despite the extra teaching burden, colleges will make some of them redundant to balance the books. They are threatening to strike if that is the result. School and college heads are considering legal action against the government. Just a few weeks earlier they had been told they would get enough money to meet the extra demand, and as a result many had already offered places for this autumn. Some say they will have to abandon the most costly courses, in particular the new “diploma”, a semi-academic, semi-vocational qualification that they reckon is twice as expensive to run as A-levels.

Britain has a depressingly large number of NEETs, young people who are not in education, employment or training. The extension of compulsory schooling was conceived partly as a way to tackle the problem, and the diploma was to make more years in school palatable. If neither jobs nor adequate school and university places are available, what are young people to do? Early unemployment has lasting ill effects, including a higher risk of future unemployment and lower lifetime earnings.

The cash-strapped government may announce a bit more money for sixth-form places in the budget on April 22nd. But some think it should be far bolder. David Blanchflower, an economist and member of the Bank of England’s monetary-policy committee, suggests raising the school-leaving age immediately. That would be expensive, he acknowledges, “but the cost of not tackling the rise in unemployment may well be much greater”.

Universities, though, are unlikely to be awarded more cash. They have been warned that, if they admit more than their revised quota of students, they will get no extra money and will also be obliged to repay the government the additional loans and grants it pays to students. Universities UK, the vice-chancellors’ lobbying group, says tens of thousands of would-be students could be left without places this autumn, despite having the grades to qualify.

Danny Dorling, a geographer at Sheffield University who has studied the effects of the spike in youth unemployment around 1980 on public health, thinks anything is better for young people than joblessness—but not all alternatives are equally good. “Make-work” state schemes to mop them up are nearly as bad as doing nothing, his findings show, and temporary jobs only a bit better. The best course is

going to college or university. It would be a pity if the current economic ill winds were prevented from blowing some good.

Computer games

Play up, play up

Apr 16th 2009
From The Economist print edition

An undersung British success cries out for a helping hand

Sony Computer Entertainment

ENTERTAINMENT awards are usually front-page news. The British Academy of Film and Television Arts (BAFTA) dishes out gongs for the best films every year and gets saturation coverage in the press. So do the Brit Awards, pop music's equivalent. The exception, therefore, is noteworthy: when BAFTA handed out its computer-game awards last month, there was scarcely a headline to be seen.

That is odd, because video games are big business in Britain. The market was the world's fifth-largest in 2007 and may have reached third in 2008, according to one estimate. Sales of games (at £1.7 billion in 2007) outstrip those of music (£1.4 billion).

Producing games is also a money-spinner. Britain's development studios and games publishers make up the third-biggest games-making industry worldwide, with revenues of £2 billion and around 10,000 employees. Studios that are British (by location if not always by ownership) include Rockstar (maker of the censor-baiting Grand Theft Auto games), Codemasters (which produces several popular driving games) and Media Molecule (author of LittleBigPlanet, shown above, a whimsical exception to the more usual thrills and spills games).

And some argue that video-games are recession-proof, or nearly so: gaming is cheap and, along with other indoor indulgences such as DVD rentals or takeaway food, tends to hold up well in a downturn. High-street and online sales of games in 2008, at 82.8m units, were 17% higher than in 2007, says the Entertainment and Leisure Software Publishers' Association.

But the shine may be starting to dull. Britain's games industry is losing ground to Canada's in the world rankings and may soon be outstripped by China and South Korea as well, says Juan Mateos Garcia, who researches the sector for the National Endowment for Science, Technology and the Arts, a British quango charged with promoting innovation.

Some reasons are structural. Cash is hard to raise from local banks and investors long uninterested in gaming. A lack of big British-owned publishers (the last was Eidos of "Tomb Raider" fame, which was bought by Square-Enix, a Japanese firm, on March 27th) further isolates the development studios. And Britain's traditional advantage of small, quirky, original design teams is less useful these days, when budgets run into tens of millions of pounds and publishers are less willing to make bets on new ideas.

Other countries, recognising a growth industry when they see one, offer state handouts. France recently brought in a tax credit equal to 20% of development costs, similar to the one it offers filmmakers. Canada is more generous still: foreign developers enjoy a five-year income-tax holiday, and firms get R&D allowances as well as subsidies for salaries. The number of developers in Montreal, many of them British,

has risen tenfold in a decade.

Britain has complained about the Canadian subsidies (a World Trade Organisation case was abandoned when ministers decided there were no legal grounds for one). But games-makers want the government to try harder. The similarly-sized film industry gets around £280m a year in state assistance, they point out. And they worry that the government is actually tripping them up. A recent advertising campaign by the Department of Health, for example, warns of the dangers of a sedentary lifestyle by showing a boy slumped on a sofa with a game controller in his hand. “They’d never have used a picture of someone sitting on his backside reading a book,” sighs one games developer.

Scared Britain

An endless series of hobgoblins

Apr 16th 2009
From The Economist print edition

Britons are frightened of fear itself

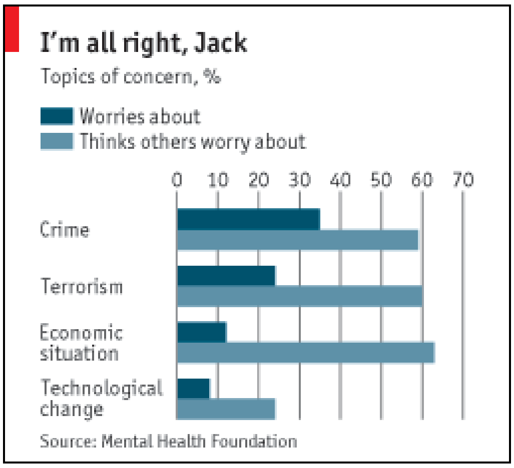
EVERY country has national myths, and one of Britain's most enduring is that of the stiff upper lip. This suggests that Britons are strong, self-reliant types who remain calm and unbending in the face of adversity. Of course, many national myths are just that, and on April 14th a survey instead painted Britons as quivering jellies, beset by fear and anxiety over everything from crime to terrorism, the economy and the pace of technological change.

On its face the poll, conducted on behalf of the Mental Health Foundation (MHF), a charity, makes worrying reading. Three-quarters of its respondents agreed that the world is scarier today than it was ten years ago, and that people are more frightened and anxious. They blamed everything from a government seen as keen to hype terrorist threats (an accusation recently made by Paddy Ashdown, a former leader of the Liberal Democrats) to the supposed infantilisation produced by official exhortations to "mind the gap" at train platforms and eat plenty of fruit and vegetables, topped off by a media that cheerfully regurgitates scare stories in order to shift papers.

Celia Johnson, the MHF's director of campaigns, thinks that people are responding to the effects of an emotional arms race. Modern media-savvy governments realise that, with so many messages competing for the public's attention—about benefit fraud, climate change, crime, drunkenness, obesity and terrorism—ramping up the fright factor is the easiest way to make sure individual messages get through. She compares a famous second world war poster that exhorted people to "keep calm and carry on" with modern warnings about smoking or junk food expressly designed to be as terrifying as possible.

Look a little closer, though, and people seem reassuringly resilient to doom-mongering. Official survey data suggest that the number of people suffering from anxiety disorders is up, but only slightly, from 13.3% in 1993 to 15% in 2007 (in America the figure is 18%). Mental health is tricky to measure, but Britain does not seem noticeably worse than other rich nations. Its suicide rate is low, and the OECD, a rich-nation think-tank, reckons that British prescriptions of anti-depressants hover around the average.

People also overestimate just how jumpy their countrymen are. Although 77% of respondents agreed that "people are more frightened or anxious than they used to be", only 37% felt that way themselves, whereas 29% said they were more sanguine than before. That discrepancy extends to specific terrors: 63% of people think the economic situation is a major cause of fearfulness in others, but only 12% of respondents confessed to feeling "quite" or "very" scared about it personally (see chart). Shame or self-delusion may explain some of the difference (28% of respondents claimed, rather improbably, never to feel frightened about anything). But they cannot explain it all.



In any case, the reign of terror may soon start to ease: the government's new mental-health strategy requires it to promote the mental well-being of the public at large. Whether that will stem the litany of doom is unclear: Britons continue obstinately to smoke, speed and be fat, and the impulse to terrify them out of such sins will remain hard to resist.

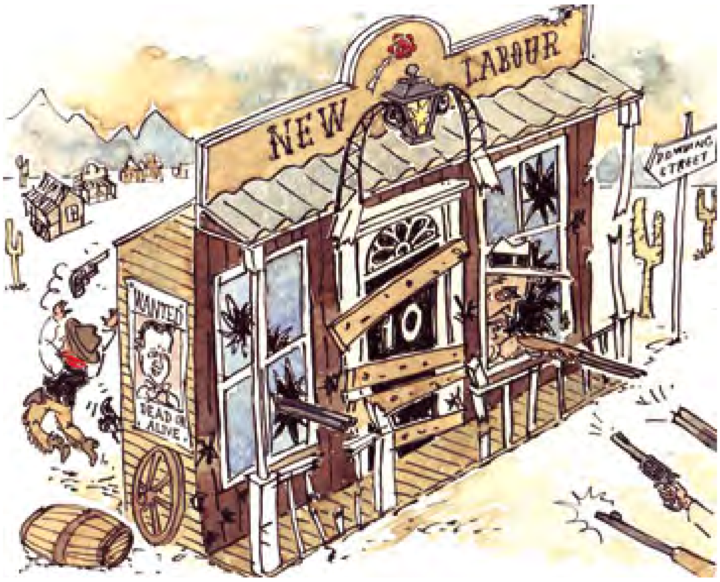
Bagehot

Tailspin

Apr 16th 2009
From The Economist print edition

How a grubby scandal encapsulates some of New Labour's deepest flaws

Illustration by Steve O'Brien



SMEARS never die. That is the beauty and horror of them. Once the lie or (in Gordon Brown's parlance) "unsubstantiated claim" is released, it sticks; the smear is forever associated with the smeared, in the public's subconscious and now by Google, however energetically it is refuted. That is especially true when the slur cleverly extrapolates from existing facts or perceptions. So the calumnies that caused a scandal in Downing Street this week are sure to adhere. The question is, to whom?

The story so far: Damian McBride, a spin-doctoring aide very close to Mr Brown, devised a series of lurid smears about David Cameron, the Conservative leader, George Osborne, the shadow chancellor, his wife and others. They were meant for use on a scurrilous new website to be run by Derek Draper, a disgraced lobbyist turned psychotherapist turned re-disgraced internet propagandist, and were e-mailed to him from Mr McBride's Downing Street address. Though the innuendoes were never deployed as intended, the e-mails were obtained by Paul Staines, a caustic anti-government blogger. Mr McBride resigned on April 11th.

The aim of Mr Brown's team since then has been to portray the sordid, if aborted, plot as aberrant freelancing by a rogue loner. It wasn't. Mr McBride's career, and the infantile antics that ended it, are hugely damaging precisely because they encapsulate some of the government's most corrosive flaws.

Consider Mr McBride's two main services to Mr Brown, for whom he worked first at the Treasury and then in Number 10. One was to cultivate right-wing newspapers, in particular the *Daily Telegraph* and two noxious tabloids, the *Sun* and the *Daily Mail*. These efforts, combined with Mr Brown's personal sycophancy and the moralising drivel that some editors preferred to Tony Blair's cosmopolitanism, won him more respect in those papers than might have been expected. But this humiliating obeisance to the tabloids is by no means new: it has been one of New Labour's imperatives since its birth. Under Mr Brown, as before, it has led to a timid government-by-headline.

Mr McBride's favouritism made him enemies among journalists—but not as many as his other main contribution to Mr Brown's premiership made among politicians. The initial claim that the new prime minister would be "unspun", with none of the leaking and distortion of yore, soon turned out to be nonsense; and in one respect Number 10's media strategy has been even more disreputable under Mr Brown than Mr Blair. Members of the government judged to be unco-operative or threatening to the prime

minister—including, on occasion, the chancellor of the exchequer, the foreign secretary and Labour's deputy leader—have been repeatedly rubbished by Mr Brown's intimates.

Such maulings helped Mr Brown keep his job when, last year, his removal seemed possible. But they fractured his cabinet, and led to Mr McBride, widely regarded as the chief assassin, being moved sideways in Number 10. Still, though the tactics may have become dirtier, civil war is also an old New Labour pastime.

Fighting the last war

When wars end soldiers sometimes find it tough to forgo violence. So it has proved with veterans of the long, debilitating feud between Mr Brown and Mr Blair and their acolytes. That rancour schooled a generation of politicians in the arts of anonymous briefing and back-stabbing—methods now publicly disavowed by some who specialise in them but already being transferred to the incipient struggle to succeed Mr Brown as Labour leader. The feud produced Labour's ur-smear, about Mr Brown's alleged "psychological flaws". Mr McBride's rise and fall illustrate how the long, nasty saga still shapes and scars the government.

On Mr Brown's watch, these methods have been reinforced by another Labour trait, sometimes submerged but now predominant: a harsh, myopic party tribalism. Oddly, it is most pronounced in some of the younger ministers and functionaries (Mr McBride is 34), who were still children during Labour's traumatising wilderness years. But Mr Brown, who sometimes seems to despise Mr Cameron so much that he can scarcely speak his name, exhibits it too. The tribalists badly underestimated Mr Cameron, blindly dismissing him as a jejune, upstart toff. They also anathemise the Tories, who to them are not merely mistaken, but evil. The corollary of this loathing is the sense that Labour is entitled to do more or less whatever it takes to keep them out.

That way of thinking may partly explain Mr Brown's reaction this week. Politics is often unkind: the Tories have sometimes cast aspersions on Mr Brown's mental health, for example. But by involving spouses and outright invention, Mr McBride plainly went too far. Mr Brown should have apologised, simply and immediately, for his underling's behaviour (Mr McBride's own apology was graceless). But it was only after prolonged political and media clamour that Mr Brown accepted responsibility for the shoddy episode. The Tories called this response inadequate and they were right. The affair suggested another nasty trait of some on the political left, who, while expressing compassion for groups, are callous in their dealings with individuals.

The eruption of these pathologies in the McBride debacle has instantly cancelled the bounce that Mr Brown's stewardship of the G20 summit won him; it may overshadow next week's budget, especially if others are implicated. But the consequences for Mr Brown will be worse and more enduring. He denies any knowledge of the slanders. Like the cleverest smears, however, this episode will stick to him, because it seems to confirm something already suspected about Mr Brown and his government: that some of its members and its rivalrous leader are monomaniacal about the getting and hoarding of power. Mr McBride's e-mails form part of New Labour's political testament.

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Selection bias in politics

There was a lawyer, an engineer and a politician...

Apr 16th 2009
From The Economist print edition

Why do professional paths to the top vary so much?

Illustration by David Simonds

WHEN Barack Obama met Hu Jintao, his Chinese counterpart, at the G20 summit in London, it was an encounter not just between two presidents, but also between two professions and mindsets. A lawyer, trained to argue from first principles and haggle over words, was speaking to an engineer, who knew how to build physical structures and keep them intact.

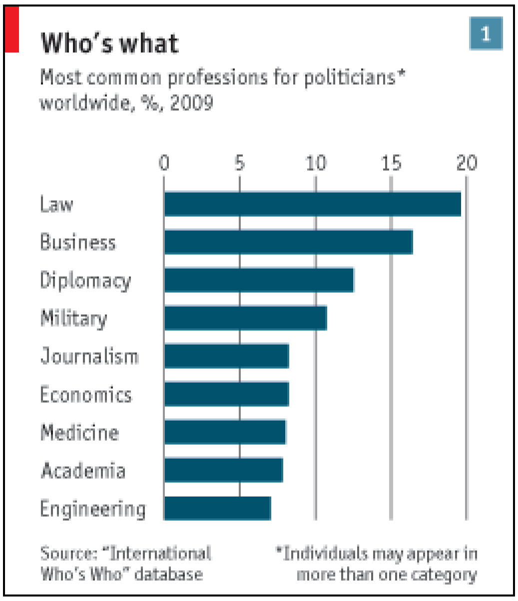
The prevalence of lawyers in America's ruling elite (spotted by a Frenchman, Alexis de Tocqueville, in the 1830s) is stronger than ever. Mr Obama went to Harvard Law School (1988-91); his cabinet contains Hillary Clinton (Yale Law, 1969-73) as secretary of state, Eric Holder (Columbia Law, 1973-76) as attorney-general, Joe Biden (Syracuse University law school, 1965-68) as vice-president and Leon Panetta (Santa Clara University law school, 1960-63) as director of the CIA. That's the tip of the iceberg. Over half of America's senators practised law. Mr Obama's inner circle is sprinkled with classmates from Harvard Law: the dean of that school, Elena Kagan, is solicitor-general; Cass Sunstein, a professor there, is also in the administration.

President Hu, in contrast, is a hydraulic engineer (he worked for a state hydropower company). His predecessor, Jiang Zemin, was an electrical engineer, who trained in Moscow at the Stalin Automobile Works. The prime minister, Wen Jiabao, specialised in geological engineering. The senior body of China's Communist Party is the Politburo's standing committee. Making up its nine members are eight engineers, and one lawyer. This is not a relic of the past: 2007 saw the appointments of one petroleum and two chemical engineers. The last American president to train as an engineer was Herbert Hoover.

Why do different countries favour different professions? And why are some professions so well represented in politics? To find out, *The Economist* trawled through a sample of almost 5,000 politicians in "International Who's Who", a reference book, to examine their backgrounds.

Some findings are predictable. Africa is full of presidents who won power as leaders of military coups (such as Sudan's Omar al-Bashir) or as guerrilla chiefs (Ethiopia's Meles Zenawi and Rwanda's Paul Kagame). Naturally, they rely on old comrades-in-arms. The army's influence can outlast its direct control. In Indonesia, military rule ended in 1998 but generals are still big in politics because, in a country of 17,000 islands, the army is

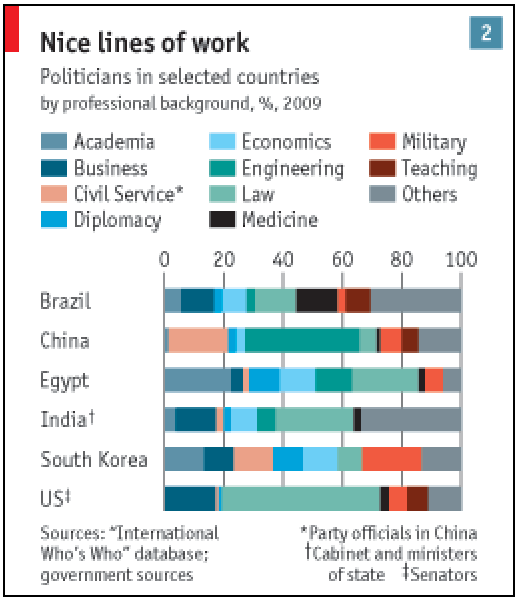
among the few nationwide institutions. But selection bias in politics (the tendency of people of similar backgrounds to cluster together) goes far beyond the armed forces. Many countries, including America, have political dynasties; in Britain, networks are formed at Oxford and Cambridge universities. Personal ties matter in China (Vice-President Xi Jinping is the son of a Long March veteran). Vladimir Putin, Russia's prime minister, has an inner circle dating from his time at St Petersburg city hall and his career in the old KGB.



Different countries—because of their history, or cultural preferences, or stage of development—seem to like particular qualities, and these qualities are provided disproportionately by only a few professions. Lawyers and business executives are common; economists, academics and doctors do surprisingly well (see chart 1).

Countries often have marked peculiarities. Egypt likes academics; South Korea, civil servants; Brazil, doctors (see chart 2). Some emerging-market countries are bedevilled by large numbers of criminals, even if this doesn't usually show up in their "Who's Who" records.

In democracies, lawyers dominate. This is not surprising. The law deals with the same sort of questions as politics: what makes a just society; the balance between liberty and security, and so on. Lawyerly skills—marshalling evidence, appealing to juries, command of procedure—transfer well to the political stage. So, sadly, does an obsession with process and a tendency to see things in partisan terms—us or them, guilty or not guilty—albeit in a spirit of loyalty to a system to which all defer. In common-law countries, the battleground of the court is of a piece with the adversarial, yet rule-bound, spirit of politics. Even in places with a Napoleonic code, lawyers abound. In Germany, a third of the Bundestag's members are lawyers. In France, nine of Nicolas Sarkozy's first cabinet of 16 were lawyers or law graduates, including the president, the prime minister and the finance minister, an ex-chairman of Baker & McKenzie, an American law firm.



In China, the influence of engineers is partly explained by history and ideology. In a country where education was buffeted by the tempests of Maoism, engineering was a safer field of study than most. In fact, communist regimes of all stripes have long had a weakness for grandiose engineering projects. The Soviet Union, which also produced plenty of engineer-politicians (including Boris Yeltsin), wanted to reverse the northward flow of some great Russian rivers, for example.

The presence of so many engineer-politicians in China goes hand in hand with a certain way of thinking. An engineer's job, at least in theory, is to ensure things work, that the bridge stays up or the dam holds. The process by which projects get built is usually secondary. That also seems true of Chinese politics, in which government often rides roughshod over critics. Engineers are supposed to focus on the long term; buildings have no merit if they will collapse after a few years. So it is understandable that an authoritarian country like China, where development is the priority and spending on infrastructure is colossal, should push engineers to the top.

A Gallic compromise

France, you might say, has elements of both American and Chinese political cultures: it is a democracy with a strong, centralised administration and a predilection for state planning. Its politics is influenced by super-civil servants: the graduates (only about 100 a year) of the Ecole Nationale d'Administration, or ENA, based in Strasbourg. ENA has a quasi-monopoly over many top civil-service jobs, which, in France, serve as stepping-stones to politics. Seven of the last 11 prime ministers and two of the last four presidents have been *énarques.* Though Nicolas Sarkozy is not one of the breed and has only one

énarque in his cabinet, he has eased the institution's hold only at the top; ENA is still a fast track to political success. A tenth of the French politicians in the sample are *énarques*.

The second most common "profession" is that of businessman. Silvio Berlusconi in Italy and Mitt Romney in Massachusetts are only two who parlayed business experience and a supposed toughness of decision-making into political office. The credit crunch has made financiers more prominent: in Britain, a former boss of Standard Chartered bank is now minister of trade; a former adviser to UBS Warburg, an investment bank, is competitiveness minister. In America, Hank Paulson, a former treasury secretary, and Jon Corzine, the governor of New Jersey, are both former chief executives of Goldman Sachs, a bank apparently blessed by Midas.

Though it might seem as if rich democracies are most susceptible to managerial charms, the suits are in fact more significant in emerging markets. Anek Laothamatas, the former leader of the Mahachon party in Thailand, argues that businessmen have played a decisive role in his country since the 1980s. Thaksin Shinawatra, the fugitive ex-prime minister and fomenter of the "red protests" that are now congesting the streets of Bangkok, is only the most prominent example.

In local elections in Russia between 1997 and 2003, 38 businessmen (all men) ran for governorships, of whom ten won. Scott Gehlbach and Konstantin Sonin, of the Centre for Economic and Financial Research in Moscow, argue that three factors have influenced businessmen to go into politics in post-Soviet countries. Politics helps them harm competitors; in new democracies, robber barons are often the only ones rich enough to finance election campaigns; and business people do not trust politicians to keep campaign promises because there is no real party discipline, so they go into politics themselves.

One might add a fourth consideration: parliamentary immunity has enabled some corrupt businessmen to ward off legal investigation. This clearly matters because, when the Kremlin started to extend its control over parliament, overriding claims of immunity, politics went out of fashion among business people. Considerations of immunity may also help to explain the remarkably large number of legally challenged politicians in India: according to the Public Affairs Centre, a think-tank based in Bangalore, 23% of members of India's parliament have been served with criminal charges.

Some mature democracies, especially Britain and America, are seeing a new phenomenon: the rise of politics itself as a profession. In the old days, politics was something you went into after doing a real job. In Britain, Tory MPs were stereotypically squires of independent means or retired businessmen; Labour ones, trade-union leaders or university lecturers. No longer. David Cameron, the Tory leader, went from university into the party's research department and, apart from a few years studying the dark arts of public relations, has been in politics all his adult life. Gordon Brown and Tony Blair, Britain's current and former prime ministers, became members of Parliament at the tender ages of 32 and 30 respectively, their other careers (journalist and barrister) having been merely useful preludes.

The emergence of politics as a career choice has been made possible, argues Peter Oborne in his book "The Triumph of the Political Class", by a penumbra of quasi-political institutions—think-tanks, consultancies, lobbying firms, politicians' back offices. They have increased job opportunities for would-be politicians. Increasingly, therefore, the road to a political career leads through politics itself, starting as an intern, moving to become researcher in a parliamentary or congressional office, with a spell in a friendly think-tank or lobby group along the way.

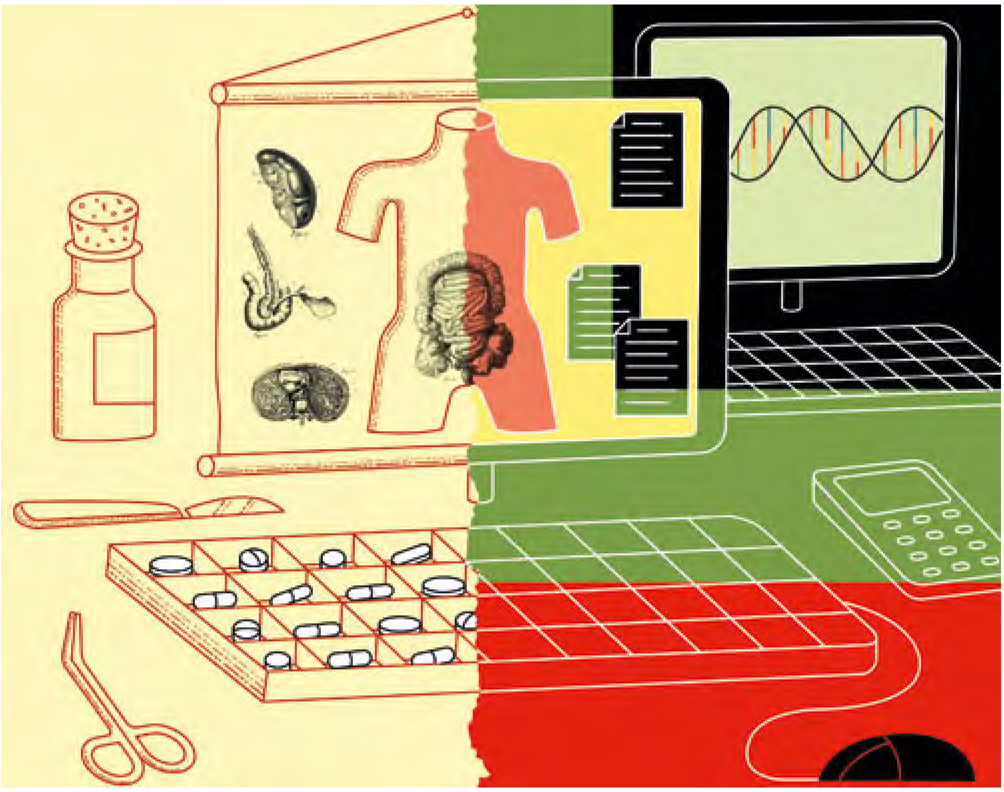
Mr Oborne says this is producing an inbred class that lacks proper connections to the outside world. Perhaps. But the trend is unlikely to stop. The intrusive demands upon aspiring members of any American administration make it harder for outsiders to enter politics. (The Obama team asked applicants, "If you have ever sent an…e-mail, text message or instant message that could…be a possible source of embarrassment to you, your family or the President-Elect if it were made public, please describe.") For good or ill, politics is becoming its own profession.

Medicine goes digital

Apr 16th 2009
From The Economist print edition

The convergence of biology and engineering is turning health care into an information industry. That will be disruptive, says Vijay Vaitheeswaran (interviewed here), but also hugely beneficial to patients

Illustration by Otto Steininger



INNOVATION and medicine go together. The ancient Egyptians are thought to have performed surgery back in 2750BC, and the Romans developed medical tools such as forceps and surgical needles. In modern times medicine has been transformed by waves of discovery that have brought marvels like antibiotics, vaccines and heart stents.

Given its history of innovation, the health-care sector has been surprisingly reluctant to embrace information technology (IT). Whereas every other big industry has computerised with gusto since the 1980s, doctors in most parts of the world still work mainly with pen and paper.

But now, in fits and starts, medicine is at long last catching up. As this special report will explain, it is likely to be transformed by the introduction of electronic health records that can be turned into searchable medical databases, providing a “smart grid” for medicine that will not only improve clinical practice but also help to revive drugs research. Developing countries are already using mobile phones to put a doctor into patients’ pockets. Devices and diagnostics are also going digital, advancing such long-heralded ideas as telemedicine, personal medical devices for the home and smart pills.

The first technological revolution in modern biology started when James Watson and Francis Crick described the structure of DNA half a century ago. That established the fields of molecular and cell biology, the basis of the biotechnology industry. The sequencing of the human genome nearly a decade ago set off a second revolution which has started to illuminate the origins of diseases.

The great convergence

Now the industry is convinced that a third revolution is under way: the convergence of biology and engineering. A recent report from the Massachusetts Institute of Technology (MIT) says that physical sciences have already been transformed by their adoption of information technology, advanced materials, imaging, nanotechnology and sophisticated modelling and simulation. Phillip Sharp, a Nobel prize-winner at that university, believes that those tools are about to be brought to bear on biology too.

Robert Langer, a biochemist at MIT who holds over 500 patents in biotechnology and medical technologies and has started or advised more than 100 new companies, thinks innovation in medical technologies is about to take off. Menno Prins of Philips, a Dutch multinational with a big medical-technology division, explains that, “like chemistry before it, biology is moving from a world of alchemy and ignorance to becoming a predictable, repeatable science.” Ajay Royyuru of IBM, an IT giant, argues that “it’s the transformation of biology into an information science from a discovery science.”

This special report will ask how much of this grand vision is likely to become reality. Some of the industry’s optimism appears to be well-founded. As the rich world gets older and sicker and the poor world gets wealthier and fatter, the market for medical innovations of all kinds is bound to grow. Clever technology can help solve two big problems in health care: overspending in the rich world and under-provisioning in the poor world.

But the chances are that this will take time, and turn out to be more of a reformation than a revolution. The hidebound health-care systems of the rich world may resist new technologies even as poor countries leapfrog ahead. There is already a backlash against genomics, which has been oversold to consumers as a deterministic science. And given soaring health-care costs, insurers and health systems may not want to adopt new technologies unless inventors can show conclusively that they will produce better outcomes and offer value for money.

If these obstacles can be overcome, then the biggest winner will be the patient. In the past medicine has taken a paternalistic stance, with the all-knowing physician dispensing wisdom from on high, but that is becoming increasingly untenable. Digitisation promises to connect doctors not only to everything they need to know about their patients but also to other doctors who have treated similar disorders.

The coming convergence of biology and engineering will be led by information technologies, which in medicine means the digitisation of medical records and the establishment of an intelligent network for sharing those records. That essential reform will enable many other big technological changes to be introduced.

Just as important, it can make that information available to the patients too, empowering them to play a bigger part in managing their own health affairs. This is controversial, and with good reason. Many doctors, and some patients, reckon they lack the knowledge to make informed decisions. But patients actually know a great deal about many diseases, especially chronic ones like diabetes and heart problems with which they often live for many years. The best way to deal with those is for individuals to take more responsibility for their own health and prevent problems before they require costly hospital visits. That means putting electronic health records directly into patients’ hands.

HIT or miss

Apr 16th 2009
From The Economist print edition

The digitisation of medical records is getting closer

DREW GREENBLATT is baffled by the technical backwardness of America's costly health system. He owns Marlin Steel Wire Products, a small firm based in Baltimore that makes components for Toyota, Roche and other multinationals. He offers good health coverage for his employees, but his health costs have nearly doubled since 2000. Last September he went to Congress to plead for legislation that would modernise the information technology used by America's medical system. "My receptionist, my shipping clerk and even the industrial robots on my factory floor use e-mail," he says, "so why can't I e-mail my doctor?"

It is a reasonable question. After all, America spends some 16% of its GDP on health care, the largest share of any big country. A man from Mars would certainly expect doctors in the world's most technologically advanced country to have ready access to e-mail, and probably also to sophisticated health information technologies (HIT) such as electronic health records (EHRs). Put simply, EHRs are digitised versions of all the bits of paper usually kept in files by all the doctors a patient sees regularly. HIT describes all the hardware, software and other kit needed to make sense of the data and to give remote access to them. Yet although most health-care providers have installed computer systems to deal with back-office tasks such as billing, shockingly few have modernised the bits of their business that patients like Mr Greenblatt encounter.

Pass the papyrus scroll

Recent studies suggest that fewer than one-fifth of the doctors' offices in America offer EHRs. Many other rich countries are doing better. Denmark has an electronic health (e-health) system to which nearly everyone is connected, and a way to track which drugs have been prescribed to whom, by whom and when. Other continental European countries are building HIT grids.

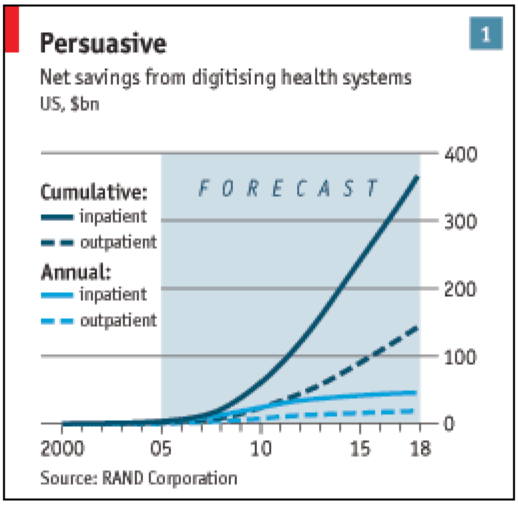
More impressively, parts of the developing world are leapfrogging the richer countries' technologies. India's Apollo hospital chain has for years been using an advanced EHRs system, built locally, that integrates back-office functions with the sort of data on patients doctors need to see. Apollo Health Street, a successful offshoot, sells HIT software and services to American hospitals. Prathap Reddy, Apollo's founder, wants to build an open-source "health superhighway" in India from which everyone can benefit, not just the better-off who use his hospitals.

Another developing-country pioneer is a Thai company, Bumrungrad. Foreign visitors to its hospital in Bangkok are often surprised by its gleaming new facilities, complete with a Starbucks coffee shop in the lobby, and by its superb customer service. Those visible signs of modernity, along with its high-quality, low-cost medical offerings, have helped to make it a popular destination for many medical tourists from the rich world. Bumrungrad makes innovative use of HIT. In the absence of suitable offerings from Western software vendors, the company also built its hospital-management system from scratch. When Microsoft decided to enter this industry a few years ago, it was so impressed that it bought the Thai firm's software division outright.

If health providers were to switch to EHRs integrated into a "smart grid" of information technologies, the future of medicine could look a lot brighter. Herbert Pardes, the head of New York-Presbyterian Hospital, believes that if used properly this bundle of technologies could give more power to patients, transform the daily practice of medicine and assist research into new pharmaceuticals.

The RAND Corporation, an American think-tank, examined the potential benefits of digitising health systems in a 2005 report. It estimated that, if 90% of hospitals and doctors in America were to adopt HIT over 15 years, the health system could save some \$77 billion a year from efficiency gains (see chart 1). If health-

and-safety benefits are taken into account, the gains could double, saving about 6% of the $2.6 trillion that will be spent on health care in America this year.



HIT sceptics, including some leading doctors, have pointed out that the RAND forecast is merely a theoretical calculation, but real-world experience now supports its conclusions. A study published in the *Archives of Internal Medicine* in January compared a group of hospitals in Texas that has adopted advanced HIT systems with a group that has not. It found that the first group suffered 15% fewer deaths and 16% fewer complications, as well as enjoying lower costs.

Even stronger evidence comes from Kaiser Permanente, an unusual American health-care chain whose 8.6m patients receive fully integrated care, rather as they would from a government-run service such as Britain's National Health Service (NHS). That made it much easier to implement an ambitious HIT system costing over $4 billion. It says it now has "100% compliance" from doctors.

In March Kaiser Permanente published evidence in *Health Affairs* showing that its digital efforts have cut visits per patient by an average of 26%, thanks to more e-mail and telephone consultations. That saves money and increases efficiency, but patients seem to like it too.

So America has at last decided to get serious about digital medicine. The giant fiscal-stimulus package passed earlier this year by Congress includes nearly $20 billion to create a national health-information network, including incentives for hospitals and doctors to adopt EHRs. But various obstacles could yet get in the way.

Back in the early 1960s Morris Collen of Kaiser Permanente attended the first global conference on "medical electronics" and became convinced that this was the future—only to see one effort after another fail over the next 40 years. Eve Kurtin of Vantage Point, an American venture-capital fund, says her company has also tried and failed repeatedly over the past 20 years. Even Google seems uncharacteristically cautious. The head of its EHRs effort concedes that "health is hard."

One stumbling block has been privacy, but the technical tools to safeguard it, such as encryption software, have improved so much that this should no longer be a problem. Recent legal changes also help. A law passed in America last year stops insurers or employers from using genetic information as a basis for discrimination. Lorenzo Valeri of RAND's European division points to a web of EU-wide and national regulations that provide strong safeguards.

A bigger obstacle has been resistance from doctors, some of which stems from failed previous efforts to introduce HIT. Doctors and nurses have too often been required to learn how to use new software but have rarely been compensated for their time or seen tangible medical benefits. That is why much of the health money in the American stimulus package will go on providing financial incentives to encourage doctors to go digital.

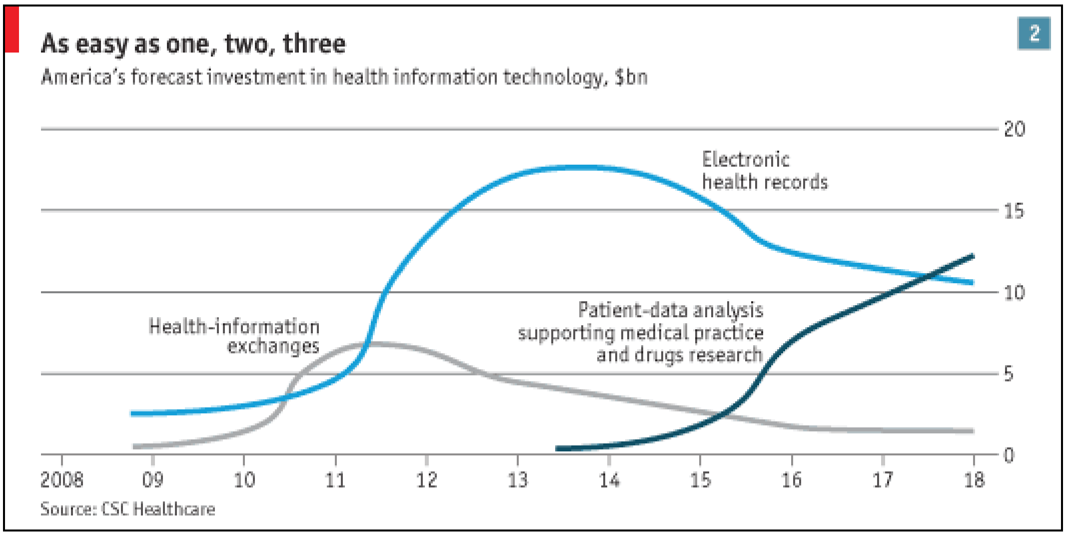
But fancy kit and pots of money alone are not enough, as Britain has discovered to its cost. Under a scheme known as Connecting for Health, the NHS is spending nearly £13 billion digitising England's health system. It may succeed in the end, but the process has been agonising. The reformers drove ruthless bargains with the HIT vendors involved, but that policy backfired, says James Barlow of Imperial College's business school. Two big vendors, Accenture and Fujitsu, were squeezed out. In January a parliamentary report concluded that the project was at least four years behind schedule and that the final cost might yet soar.

An even bigger flaw was that the project was too top-down. Doctors and hospitals groused that their concerns were not reflected in its design. John Halamka, the chief information officer at Harvard Medical School, thinks that reformers need to take a bottom-up approach and listen to both doctors and patients. He has shared EHRs with patients at Boston's Beth Israel Deaconess Medical Centre for years and is convinced patient control works better.

Top-down or bottom-up?

Simon Eccles, the medical director at Connecting for Health, counters that "sometimes centralisation is good." A top-down approach, he says, makes it easier to set common security standards and data-sharing protocols, for example. That may well be true for small countries. Denmark, for example, has done well with a modest top-down HIT system. But it will probably work less well in a large and heterogeneous system like the NHS. Dr Eccles concedes that his system could have provided more choice to local hospitals.

Kaiser Permanente's Dr Collen, now in his 90s, thinks that technology has at last become robust and reliable enough to implement the vision he had over four decades ago. But the father of HIT insists that digitisation will succeed only if coupled with empowerment: "The patient has lived with his medical problem and often knows it better than the doctor."



The American HIT reforms will unfold in three phases (see chart 2). The first will involve health-information exchanges to make sure that systems work together. The next phase—which may run concurrently with the first—will be the adoption of EHRs. The final phase will involve the analysis of patient data to improve medical practice and drugs research.

One concern is that big software vendors or health providers with expensive legacy systems may try to slow things down so that they can milk their existing businesses. Peter Neupert, who heads Microsoft's HIT effort, fears that a debate about standards could turn into an excuse for inaction: "Let's remember HIT is not like railways, where the gauges had to match perfectly for interoperability."

America's respected Institute of Medicine has expressed similar concerns. In a recent report it pointed to the dangers of too "monolithic" an approach and said that medical information must be free to move about on rival software systems.

The best way to ensure that the first phase does not get captured by interest groups may be to push ahead with phase two at the same time by putting EHRs in the hands of patients. But this is controversial. Thomas Lee, the boss of Partners Community Healthcare, a large health provider in Boston, and a medical doctor himself, acknowledges that the days of the all-knowing doctor are gone. "I openly Google things I don't know in front of my patients," he says. But nor does he think patients should be given a free hand: "I want the provider to control records behind a firewall, and to let patients peep into them as necessary."

That view is squarely opposed by Aurelia Boyer, the chief information officer for New York-Presbyterian Hospital and a former nurse. She thinks that health care is "paternalistic by nature." Rather than wait for HIT integration among lumbering health-care giants, she wants to give patients access to their data immediately, in the hope of linking up the disconnected bits of the health system more speedily.

Her hospital has just launched a pilot EHRs scheme using Microsoft's Health Vault software that gives full control of data to individuals. Patients can now decide which bits of their records they wish to share with whom: all of them with their emergency medical doctor, most with their insurers, some with their dermatologist, and so on. Some doctors worry that patients may not always make the right decisions, but at least an electronic system will eliminate the mix-ups that happen in today's paper-based system.

A recent investigation of the NHS by the *Health Service Journal* found that many paper-based records are lost or misplaced. It calculated that perhaps 1.2m British patients are being treated each year by doctors without proper notes to hand. Ian Gallifant of Zaptag, a brash British firm that is trying to prise control of medical records away from doctors, puts it this way: “Records have to be owned by someone and the trials in Britain are perhaps indicating that the NHS is not the entity to have that responsibility. Why not the individual, who has the most to gain?”

Flying blind

Apr 16th 2009

Digital medicine will improve medical care—and possibly revive drug discovery too

Illustration by Otto Steininger

ANDY GROVE thinks health-care experts should study the chip business. The former boss of Intel, a pioneering microprocessor firm, has spent a lot of time in hospitals of late because he has been battling with prostate cancer and Parkinson's disease. His experience with uneven care, medical errors and slow innovation has convinced him that the health industry needs to do much better.

Dr Grove acknowledges that health care is much more complex than chip manufacturing, but argues that the learning process in medicine is needlessly slow. In his business, firms always reserve a small portion of each newly designed chip for testing. This reduces the part available for commercial use, but it allows firms to learn quickly from failures. By contrast, health care often lacks real-time information systems and data feedback loops are sluggish. Learning comes in batches, like slow and infrequent trains, not like continuous Federal Express deliveries.

In the past, observes Dr Grove, hospitals rarely designed experiments to measure the comparative effectiveness of alternative interventions. Even in drugs trials researchers do not try hard enough to learn from failure. He cites in evidence a drug trial by Amgen, a biotech giant, where the researchers concluded that the drug was not effective. But it did work in some people, just not sufficiently well in enough of them to count as a success.

So why did it work at all in anyone? Someone with a physics background would think that the problem was poorly targeted delivery of the drug within the body, he says, not the drug itself. "We've got to know."

A growing chorus of thinkers is arguing that health-care providers and drug companies must shift to a culture of continuous improvement of the sort that made Toyota famous. In fits and starts, this is beginning to happen. In time, as countries integrate EHRs with clinical practice and drugs research, it will become the norm.

"The dirty little secret about medicine", confides Paul Yock of Stanford University, "is that we physicians make decisions all the time based on woefully incomplete information." He is convinced that investment in a medical smart grid can make medicine more systematic and evidence-based. At present, health outcomes vary enormously among and even within institutions. HIT, done properly, can produce systems that advise doctors on best practice and help hospitals identify the causes of variability.

Winning hearts and minds

Buying a lot of expensive computers is not the answer. As Harvard's Dr Halamka puts it, "just automating a broken process doesn't accomplish much." Indeed, the boffins at the Institute of Medicine reckon that spending on digitisation without connecting it to the organisational culture risks making things worse. Any new HIT systems, they say, must include "cognitive support" that helps doctors and patients make sense of the deluge of medical data that will come their way.

One way to do this is to devise software systems that mine data on large numbers of patients with similar illnesses and provide guidance to doctors in real time. The system used by Kaiser Permanente can spot potential interactions among drugs or alert nurses, say, that an elderly patient should come in for a flu shot.

Big health-care payers, whether private insurers or governments, are becoming convinced that this kind of HIT not only improves medical practice but can save money too. Ronald Williams, the head of Aetna, an American health-insurance giant, says his firm has invested $1 billion so it can mine its customer database for information to be conveyed to physicians electronically.

Not this leg

Smart software can also reduce medical errors. A study published in the *British Medical Journal* in 2007 estimated that 30,000 hospital patients in the Netherlands suffered avoidable harm each year because of such mistakes, and 1,700 of them lost their lives. A report by the Institute of Medicine estimated that up to 100,000 Americans are killed each year by preventable mishaps such as wrong-side surgery, medication errors and hospital-acquired infections—a larger number than die from breast cancer or AIDS.

Sometimes such errors can be prevented without fancy technology. It helps to write “not this leg” on a patient’s left leg before surgery on his right leg. When Kaiser Permanente’s innovation laboratory looked into errors in medication dosage, it found that a lot of them were due to interruptions. Now nurses preparing complex medications wear “do not disturb” sashes, which has caused errors to drop noticeably. A striking study in the *New England Journal of Medicine* showed that surgical errors and complications fall by one-third if hospitals use a simple safety checklist before, during and after surgery.

Another effective fix is the electronic tracking of medications and patients with radio-frequency identification (RFID) tags or bar codes. But for that to work, a hospital must put a decent HIT system in place first.

The health-care industry has started to learn from the successful efforts at quality improvement in other big and complex industries. Many health providers now employ statistical tools like Six Sigma, long used by firms like GE to reduce variability in manufacturing, and other methods borrowed from industry.

Some doctors remain suspicious, fearing that the number crunchers will commoditise medicine. Bill Gates, Microsoft’s former boss, acknowledges that it is impossible to “routinise” the complex job of a doctor, and feels that techniques which worked in other industries cannot be applied to medicine without further thought. Still, he is struck by the enormous variance between average and best outcomes in hospitals: “We’re not even close to our potential in this industry. Given our very high costs, America must be the pioneer.”

One physician who readily admits to being a technosceptic is Craig Smith of New York-Presbyterian Hospital. A cardiac surgeon, he insists that “medicine is a performing art, and you’ll never end variance.” He concedes that he used to see HIT as more of a nuisance than a help. But in the past year patient-centric EHRs, clinical-decision support systems and hospital-analytics software have become so user-friendly and useful that he is now an enthusiastic convert: “When you get HIT right, a doctor is no longer limited by the lessons of personal experience.”

Another area where HIT could prove very helpful is in the discovery, dispensation and dosing of pharmaceuticals. At the moment there is precious little information about how drugs are actually used and how different drugs interact with each other. Some experts suggest that perhaps half of all medicines are taken at the wrong dose and frequency.

A smart grid for medicine could change that. Dr Eccles of the NHS’s Connecting for Health scheme is convinced that if such a system had been in place, the trouble with Vioxx (a painkiller made by Merck that was recalled after a spate of deaths) would have been spotted sooner. Advocates envisage linking EHRs with research so that patient records can be “combined and mined” to look for similar correlations.

Done right, such a system could even answer Dr Grove’s call for faster “information turns” that could lead to speedier development of new treatments. Daniel Vasella, chairman of Novartis, a Swiss drugs giant, thinks that any future HIT systems must measure outcomes in a standardised format, capture any side-effects and feed that information back to the pharmaceuticals researchers.

But the idea of allowing researchers to harvest patient data, even if privacy safeguards are in place, is proving controversial. A Dutch effort to implement EHRs was delayed earlier this year because inadequate safeguards for patient privacy caused a public backlash. And in Britain in March angry medical groups protested to the justice minister about a proposed scheme to harvest medical data. Apparently the government’s initial plan had been to scour EHRs not only for medical purposes such as drugs

research but also for political objectives such as finding out who was eligible for free school meals.

A sense of ownership

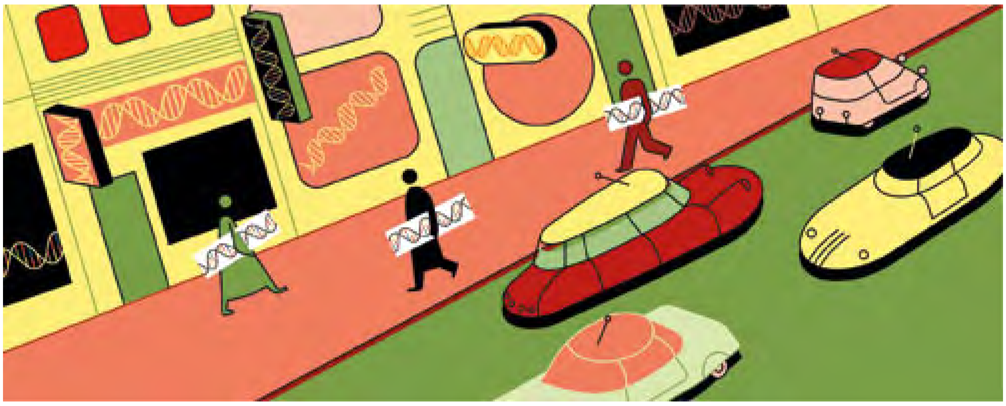
Such incidents bolster the arguments for ensuring that EHRs be firmly controlled by patients rather than doctors or hospitals, let alone governments. Even Dr Eccles agrees: “In England we have a paternalistic approach akin to a parent-child relationship.” At the moment, he explains, patient records are legally the property of the government, but in practice hospitals act as though they own them. In future he wants to see patients being given equal access: “If done this way, I think digitisation can put the patient back in charge of his own care.” That may even allow patients to drive medical research.

Getting personal

Apr 16th 2009
From The Economist print edition

The promise of cheap genome sequencing

Illustration by Otto Steininger



“TWENTY years ago doctors had tight control over all medical information. We want that power to shift to individuals,” says Anne Wojcicki, a co-founder of 23andMe, a Californian genomics firm that counts Google as one of its investors. Her firm takes in saliva samples by mail, analyses a tiny bit of the genetic material they contain and posts information about the provider’s health and ancestry gleaned from them on a secure website.

She wants to extend the idea of patient empowerment to the age of genomics (the study of all genes in the genome and the interactions among them). Her customers are already forming online chat groups and blogs to share details of specific genetic mutations and exchange family and genomic histories.

Does the analysis done by her firm have enough predictive value for its subjects to take action? She points to the example of Sergey Brin, a co-founder of Google, who happens to be her husband. When an analysis by her company found that Mr Brin had an above-average risk of getting Parkinson’s disease, he began to take his exercise (which is thought to help prevent this disease) much more seriously.

The consumer-genomics firms that have sprung up in the past few years are all similarly upbeat about their prospects. David Agus of the University of Southern California (USC), an adviser to Navigenics, another such start-up, thinks that companies wanting to promote employee “wellness” will boost this trend. Among the investors in Navigenics is Kleiner Perkins, a venture-capital firm that was an early backer of Google, Amazon and AOL.

But consumer genomics is not just a Silicon Valley fad. YiGene, a Chinese start up, is jostling with several local rivals to provide genetic testing and counselling to Asian consumers. And it was Iceland’s deCODE that led the way by creating a massive database—made up of the country’s entire population—that it is now tapping to do genomic research. Kari Stefansson, its boss, thinks that in future genomic tests will be done on personal computers, and that all children will have their genomes fully sequenced at birth.

In the decade since the Human Genome Project reported preliminary results in 2000, the promised benefits of genome-inspired drugs and more individualised health care have failed to materialise. Could personalised medicine now be closer at hand?

Sniping at snips

Some academics remain deeply sceptical. Allan Balmain of the University of California, San Francisco questions the scientific basis for the claims made by such firms. David Altshuler of the Broad Institute, a genetics-research centre run jointly by Harvard and MIT, thinks the firms encourage people to read too

much into their results. Such “fallacies”, he says, are causing a public backlash that could divert attention and resources from the worthier goal of genomics-inspired disease research.

One big concern is that the firms in question do not, in fact, sequence the entire genome for their analysis. That would be far too expensive, even though sequencing costs are falling fast. The firms analyse only a tiny part of a customer’s DNA. In particular, they look at certain parts of a chromosome known as single-nucleotide polymorphisms (SNPs, pronounced “snips”). They argue that variations in SNPs are correlated with the likelihood of developing a range of nasty diseases. The firms’ scientists insist they rely only on the best peer-reviewed scientific studies on the matter, and it is true that over the past two years a flood of well-designed studies, known as genome-wide association studies, has established correlations between a range of common SNP variants and diseases ranging from diabetes to various forms of cancer.

Craig Venter, a biotechnology pioneer, is usually a fan of brash upstarts. A decade ago he upstaged the boffins of the official Human Genome Project by privately sequencing his own genome faster and more cheaply. But he remains sceptical about analysing only the SNPs. He wants to see whole genomes sequenced because “we don’t yet know which parts of the genome are medically relevant.”

Others agree that sniffing around SNPs is an imperfect substitute for doing comprehensive scans of the full human genome. The gene-variant SNPs reported in those genome-wide studies are undoubtedly associated with diseases, but some believe their significance is greatly overstated. Even if firms uncover a handful of SNPs that suggest an increased risk of getting a disease, the customer may have a dozen other genes that lower the risk.

Some say that the common variants easily uncovered by today’s sequencing technologies are much less important than other, rarer variants. There is not enough knowledge to make sense of the torrent of genetic information being uncovered. The problem is that today’s tool of choice, the genome-wide association studies, which link genetic variants in a given population with known diseases, cannot easily find such needles in a haystack. But as the cost of sequencing drops, firms hope to be able to get much better at needle-spotting.

Yet another camp of sceptics rejects the whole idea that medicine will ever be truly personalised. It is unusual for a disease to be caused by only one or a few genetic defects. Most disorders, such as diabetes and heart disease, are linked to dozens or possibly hundreds of genes. And those genes affect only an individual’s susceptibility to a disease. Choices about exercise, diet, smoking and so on could have a bigger influence. So Dr Altshuler thinks it unlikely that scientists will ever be able to predict disease perfectly, never mind devise truly personal therapies.

Keep off my genome

Though he has the world’s most advanced gene-sequencing technology at his fingertips, Dr Altshuler refuses to get his own genome sequenced: “If someone gave it to me on a CD, I’d refuse to look at the disc. The information is meaningless.” Bill Gates agrees. He has not had his genome sequenced either, nor does he plan to, though after a moment’s reflection he adds, “unless I find out I have cancer.”

This last observation suggests that there is a future for the diagnostic use of whole-genome sequencing. But first the cost will have to come down with a bump, from perhaps $100,000 per scan today to below $1,000. That could happen in less than a decade. Until then, the biggest use of genomics is likely to be in drugs discovery.

Big pharmaceutical companies have watched their innovation pipelines dry up in recent years, but rapid advances in genomics now promise to change that. Cancer is at last beginning to reveal its secrets, thanks to a technology known as the biomarker, which is a genetic indicator different from an SNP. Biomarkers reveal such useful things as the effectiveness of potential new drugs in individuals or groups, as well as the likelihood of adverse reactions. A forthcoming report from the OECD argues that genetic biomarkers are emerging as one of the most effective means of improving the efficiency of drug discovery.

Researchers are now trying to find out to what extent the efficacy and safety of many new drugs is influenced by genetic factors. For example, during trials of an apparently unsuccessful drug for lung cancer made by AstraZeneca, a British drugs firm, USC’s Dr Agus discovered that the drug worked well in some of his patients of Asian descent. Similarly, some people of African origin seem to respond well to

BiDil, a heart drug, whereas those of other ethnic stock do less well on it.

It is surprising, therefore, that the ailing drugs industry seems indifferent to genomics, except in cancer research. Dr Venter believes the reason is economic: “Genomics is totally changing the basis of medical research, but Big Pharma was better off when we knew less.”

Russ Altman of Stanford University agrees that the big drugs companies are dragging their feet on genomics, noting that the industry’s traditional blockbuster model with its huge potential market relies on standard remedies that work for everyone. That was a plausible strategy when scientists had few tools to determine the likely risks and benefits of new drugs, but given the advances in pharmacogenetics it is no longer sustainable.

Dr Altman’s team recently published a study in the *New England Journal of Medicine* on how to dose warfarin. This drug is widely used to prevent blood clots that could lead to strokes or heart attacks, but the correct dose can vary widely from patient to patient. Too high a dose can cause a patient to bleed dangerously, whereas too low a dose can lead to deadly clots. The study showed that dosing decisions that took account of variations in just two specific genes in addition to factors like age, weight and race produced far better outcomes than decisions based only on the latter traditional factors. Dr Altman thinks the Vioxx tragedy could have been avoided with proper genetic screening, but firms have little incentive to do this.

Now some drugs companies seem willing to plunge into targeted therapies. Sandra Peterson of Bayer, a German pharmaceutical giant, acknowledges that “old-fashioned blockbusters just aren’t going to happen any more.” She thinks the way to fix the drugs pipelines at big firms is to link pharmacogenetics with the information supplied by medical smart grids, moving towards a model of innovation that is informed, targeted and cheaper.

But Novartis’s Dr Vasella still rejects the notion of personalised medicine, pointing out that it would be economic folly for firms to develop a special pill for every patient. He accepts that linking individual genetics with specific therapies is the big challenge for his industry today, but he is still looking for a suitable business model.

Perhaps a better way of describing how genomics will change the drugs business model is mass customisation. The obvious parallel is clothing, which is rarely tailor-made but often personalised to reflect an individual’s needs and choices. Clayton Christensen of Harvard Business School offers a useful phrase to describe the point where pharmacogenetics and personalised medicine meet: “precision medicine”.

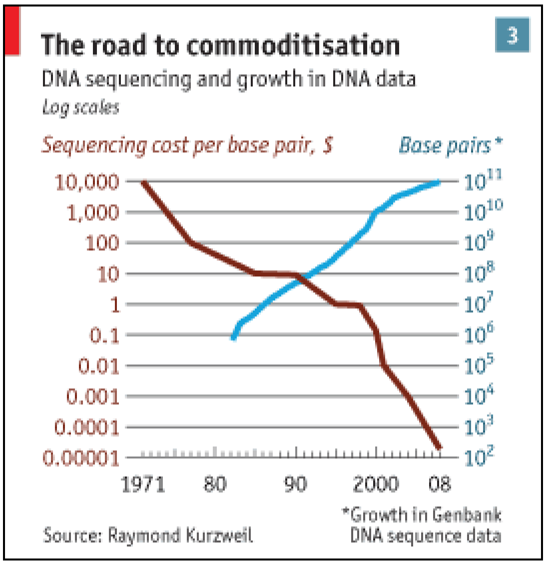
A new Moore’s law

Purists like Dr Venter sniff that the technology for reading SNPs is not good enough for serious applications like medicine, never mind how cheap it gets: only reliable full-genome scans will do. These are much more expensive because they must capture information about all 3 billion base pairs, the genetic “hitters” in the human genome. The gene chips used to study SNPs today can capture perhaps 1m.

“I spent ten years searching for just one gene,” says Dr Venter about his early career. “Today anyone can do it in 15 seconds.” The official Human Genome Project sequenced a single genome at the cost of about $4 billion. Dr Venter’s rival project did the same thing for $100m. The two competing teams agreed in 2003 that each of them had independently sequenced a human genome. Since then the industry has undergone a technological transformation. Sequencing equipment has been improving even faster than microprocessor performance, which doubles roughly every 18 months for the same outlay under a rule dubbed Moore’s law (see chart 3).

The sequencing technology works by figuring out the precise sequence of letters that make up the genetic code of life. The first generation of sequencing equipment was thorough but extremely slow and expensive. George Church of Harvard

University, who worked on the original Human Genome Project and now advises several genomics firms, compares that cumbersome old technology to mainframe computing. Today's second-generation technologies, he says, are already as disruptive as the original personal computers were to mainframes.

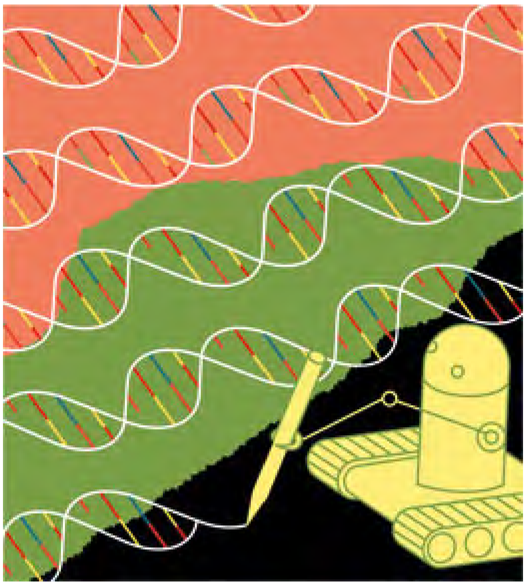


The newer sequencing machines borrow ideas from silicon-chip manufacturing. One consumer-genomics firm called Knome (pronounced "know-me") uses nimble machines that deposit millions of tiny dots filled with DNA snippets on a flat surface, typically glass. The DNA in these dots can be "read" by molecular machines to signal the presence of different DNA variants. This process has brought down prices by a factor of ten every year since its introduction in 2005.

The next sequencing technologies promise to read whole genomes quickly and at a reasonable cost, and several rival firms are already racing to get them to market. When they do, it will have a profound impact on the economics of health care.

The X Prize Foundation, a charity, is now offering $10m to the first outfit to sequence 100 human genomes in ten days at a cost of $10,000 or less per genome. Many teams have signed up, but the most promising have their eyes on an even more lucrative prize: the multi-billion-dollar commercial market for affordable, accurate sequencing of whole genomes.

Illustration by Otto Steininger



One such firm is Pacific Biosciences, based in Menlo Park, California. It makes novel use of fluorescent labels that allows it to read long stretches of DNA fragments, base by base, quickly and efficiently. Stephen Turner, the firm's founder and chief technology officer, is confident that his firm will soon be able to sequence a complete human genome in under 15 minutes. He expects its first commercial product within two years.

Another, more tight-lipped, contender in the race for cheap full-genome sequencing is Oxford Nanopore. The British firm is developing a promising technology which involves passing genetic material through a tiny hole in a specially selected protein. This promises to read DNA directly, without a need for fluorescent labels. This would be a big breakthrough, but the firm will not yet say when it will be ready for commercial use or at what price.

Perhaps the most intriguing of the rivals is Complete Genomics. Its offices in Mountain View, California, are not far from the headquarters of Google, and are modest by comparison, but its business strategy is no less audacious than that of its big neighbour. The firm's technical innovation involves packing lots of DNA into great numbers of tiny dense "nanoballs" which, in turn, are assembled in a highly efficient way into arrays that resemble microscope slides. The DNA sequence is worked out by using fluorescent tags, but does so in a way, developed by Dr Church's laboratory at Harvard, that is much more accurate and quicker than the methods used up to now.

Service with a smile

This process is too complex for the average customer to handle, an apparent drawback that led to a brilliant commercial idea: rather than sell the equipment, Complete Genomics intends to sell a sequencing service. Clifford Reid, the chief executive, explains that his firm's process can easily be adapted to huge volumes. By June he will be able to sequence a complete genome for under $5,000, and within a year his firm will have a commercial offering, he says.

If whole-genome sequencing can be done cheaply and accurately, it will be used much more widely in drug discovery and clinical practice. The consumer-genomics companies' controversial promise of

personalisation will at last be put to a proper test. In time the costs of sequencing will plunge towards $100 a genome. When it does, says Dr Altman, sequencing will become a commodity.

Dr Church even argues that genome sequencing "will in effect be available free" because companies will give away sequencing to sell other services, such as genetic interpretation—much as mobile operators "give away" handsets to get customers to sign up for lucrative service plans. And when this happens, he reckons, "it will be just like the internet: once all this information is floating around, a lot of creative people with PCs will nose around and develop applications."

A doctor in your pocket

Apr 16th 2009

Developing countries are using mobile phones to leapfrog to personalised medicine

Illustration by Otto Steininger

CAN new technologies help to tackle the health problems of the world's poorest? At first sight, it seems a silly question. After all, the public-health systems in much of sub-Saharan Africa and parts of Asia and Latin America are rudimentary at best. With many villages having no clean water or basic sanitation, let alone reliable access to clinics and doctors, modern wizardry like molecular diagnostics and digital medical records seem irrelevant.

Bill Gates used to be on the side of the sceptics. Nearly a decade ago, when he was boss of Microsoft, he delivered a speech at a conference on technology for the developing world, inveighing against the idea that modern technologies like satellite communications links, solar power and internet-enabled computers could magically improve the lives of the poorest. Did they have any idea, he asked his listeners, what it means to live on less than $1 a day? "You're just buying food, you're trying to stay alive."

Last year Mr Gates stepped down from Microsoft to run his family's charitable foundation, which has become the richest and most influential new voice in global public health. His decade or so of experience with the foundation's work in public health seems to have changed his mind about what is good for the developing world. He now says that "poor people absolutely deserve better technology."

Sometimes those technical advances can be incremental. The poor clearly benefit from technical improvements that cut the cost of manufacturing medical devices, make drugs more effective or eliminate the need for refrigerating vaccines. But there is also the chance of big breakthroughs that save many millions of lives. Mr Gates points to the examples of mass vaccination and antibiotics. Modern antiretroviral drugs to treat HIV/AIDS could be added to that list of breakthroughs, because they too have improved countless lives in the poor world. His foundation is now spending heavily to find new vaccines for HIV/AIDS and malaria, and encouraging research into cures for antibiotic-resistant forms of tuberculosis.

Given the risk-averse culture of the health systems of the rich world, Mr Gates suggests that some great advances could emerge as leapfrogging innovations in the poor world. As it happens, the next great technology revolution in health care is even now bubbling up from the villages of Africa and may in time benefit the rich world too. It is built on the astounding success of the most famous of all leapfrog technologies: mobile phones.

Dial M for Masiluleke

To see a place where gizmos and gadgets seem utterly unequal to dealing with a health challenge, go to KwaZulu-Natal. This heavily populated province of South Africa has one of the highest rates of HIV infection in the world, despite recent advances in tackling the disease.

For years the South African government undermined efforts to contain AIDS by casting doubt on its viral origins, but the current health minister has abandoned that outrageous stance. There was also a legal stand-off between activists and drug companies that threatened to cut off the country's access to antiretroviral drugs, but in the end Big Pharma backed off. Today South Africans can count on a supportive (albeit overstretched) public-health system, access to affordable drugs and free testing and counselling. Even so, HIV/AIDS remains rampant in KwaZulu-Natal.

Zinhle Thabethe explains why. So great is the stigma attached to the disease that some four-fifths of victims in the region will not venture into their local clinic to get an HIV test. Across South Africa perhaps

a quarter of the population is HIV-positive, but fewer than 5% know their status. As an HIV patient herself, Ms Thabethe was so incensed by this state of affairs that she helped start iTeach, an outreach programme based at one of the busiest hospitals in KwaZulu-Natal. She and her collaborators came up with a clever way to use mobile phones to reach reticent sufferers.

In co-operation with MTN, a big mobile carrier in South Africa, American academics and several other innovative groups, iTeach has launched Project Masiluleke. Using a form of text messaging similar to SMS, this sends out up to a million short messages a day, encouraging the recipients in their local language to contact the national AIDS hot line. The response has been spectacular, especially among young men who have proved hard to reach in the past. When people ring, they are often told about clinics outside their immediate community; in future they will be offered special test kits they can use at home.

This scheme is already the world's biggest field trial of mobile health technology (or mHealth), and Ms Thabethe is convinced it can be copied across Africa. She believes it works not just because so many people have mobiles but because it "sidesteps the stigma as mobile phones are very personal. And unlike radio or billboard ads, a message on your phone forces you to take a moment to think and maybe act."

She is not alone in putting her faith in the ubiquity, personal convenience and interactivity of mobile phones. "It's not just about technology," says Karl Brown of the Rockefeller Foundation, a charity with expertise in this area. "Because mobile phones enable multidirectional flows of information even in the most remote parts of the world, they have the power to transform health care."

The most promising applications of mHealth for now are public-health messaging, stitching together smart medical grids, extending the reach of scarce health workers and establishing surveillance networks for infectious diseases. The use of the technology is spreading: a recent report funded by the UN Foundation and the Vodafone Foundation, two charities, documented more than four dozen projects across the developing world.

In Uganda, Text to Change uses an SMS-based quiz to raise awareness among phone users about HIV/AIDS that brought a 40% increase in the number of people getting tested. A study in Thailand in 2007 showed that compliance with a drug regimen to tackle TB jumped to over 90% when patients were sent daily text reminders to take their pills on time.

Another promising application of mHealth involves integrating mobiles into EHRs and software for clinical-decision support. In western Kenya a new counselling and HIV-testing project allows rural health-care surveyors to set up EHRs from patients' homes by putting their data into mobile phones. Developed by a team led by Kenya's Moi University, this aims to establish EHRs for some 2m patients. Public-health officials think this will help them identify and treat HIV patients and improve continuing patient care.

One lesson emerging from these various experiments is that the visible face of any mHealth or e-health scheme, regardless of where it operates, needs to be as simple and user-friendly as possible, whereas the hidden back end should use sophisticated software and hardware.

The mobile-based technology provided to Rwandan health workers by Voxiva, an American firm, should make users in rich countries jealous. Local officials in Rwanda now have mobile phones loaded with software that allows them to enter and transmit health data back to their base so they can access information on potential outbreaks, shortages of medicines and so on in real time. They also use mobiles to order medicines, send public-health alerts and download medical guidelines.

On call

Another area in which mHealth could make a big difference is in helping to get the most out of the inadequate staff of health-care systems in the poor world. Some critics maintain that what Africa needs most is more money for doctors, not fancy technology. But Laurie Garrett of the Council on Foreign Relations (CFR), a think-tank, argues that even with extra money for medical training Africa cannot realistically hope to have enough doctors in rural areas in the near future. Training doctors takes time, and many of them do not want to work in remote areas. So Ms Garrett wants to see community health workers trained to perform many of the simpler medical tasks currently done by doctors.

This new sort of remote medicine is gaining currency. CFR has come up with a concept it calls "doc in a box", which is a standard cargo container fitted up to serve as a basic rural health clinic. The box, which

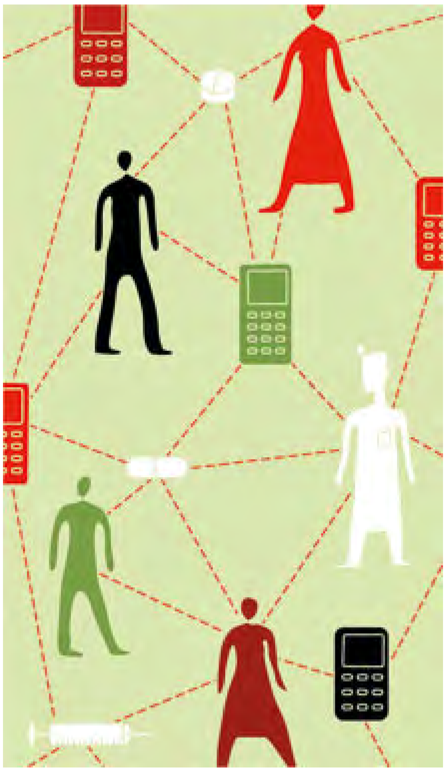
costs a few thousand dollars to make, allows trained villagers to offer many services, such as vaccinations and basic malaria treatment, that would otherwise require a trip to a faraway clinic. The units will be linked by mobile phone to fully trained professionals.

In Mexico an mHealth initiative is already turning a profit. Some 4.5m Mexicans are customers of Medicall Home, a firm that provides unlimited consultations by mobile phone with doctors for a flat fee of about $5 a month. Pedro Yrigoyen, one of its founders, explains that many of his countrymen lack health insurance or live in remote areas far from hospitals, but almost always have mobile phones. His firm is now working with Voxiva to offer more mHealth services and to extend them across Latin America. With funding from Fundación Carso, a charity funded by Carlos Slim, a Mexican telecoms magnate, the group hopes to mine its data to benefit both patients and public-health officials.

Preventing the next AIDS

How far can this technology go? Larry Brilliant, a physician who is the official “chief philanthropy evangelist” for Google’s charitable arm, has an audacious goal. He believes that a combination of mobile telephony and information technologies, deployed in a robust global surveillance system, can catch the next SARS or HIV long before it turns into a global pandemic. The key, he says, is “early detection and effective early response.”

Illustration by Otto Steininger



That is easier said than done, as Gabriel Leung knows all too well. Dr Leung is the Hong Kong government official in charge of pandemic preparedness. The city is especially important to the rest of the world for two reasons. First, it is close to the Pearl River delta, one of a handful of viral “hotspots” which, thanks to close contact between humans and wild animals, is the source of many potential viral threats. Second, Hong Kong is a major hub for air travel, so a deadly bug that passes undetected by the city’s health officials could quickly travel around the world and cause a potential pandemic, as SARS did a few years ago. “We are the world’s sentinel for pandemics,” Dr Leung says. But he is confident that his city is well equipped for its task.

Dr Brilliant explains that his scheme for predicting and preventing infectious diseases depends on information fed in from the grassroots. The need for this was brought home to him in India where he was helping to eradicate the last remnants of smallpox. “We couldn’t just periodically blanket every home with vaccinations,” he says. “We had to know where to look.”

One relatively new tool in the box is digital detection. Researchers at Google, MIT’s Media Lab, IBM and other outfits are applying sophisticated software tools to try to predict outbreaks of disease. For example, software can “crawl” the web and look for press reports in many languages that point to the outbreak of an unusual disease. In a study published in *Nature* in February, Google demonstrated how this technique was able to predict flu outbreaks in America a week or more before the government’s Centres for Disease Control did.

Such “rumour registries” are useful, but any leads must be validated by boots on the ground. Public-health surveillance systems are increasingly using mobile phones and smart hand-held devices for this task too. When Kenyan officials last autumn suspected that Somali refugees might have brought polio into the country for the first time in 20 years, they alerted health workers in the area who used their mobile phones to log patient symptoms, medications dispensed and so on. By analysing those data remotely, health officials in the capital were able to contain the outbreak.

Nathan Wolfe wants to transform surveillance into a predictive tool rather than wait for signs of trouble. He recently left his post at the University of California, Los Angeles, to head the Global Viral Forecasting Initiative (GVFI). Since most deadly viruses, like HIV and SARS, originate in wild animals, he spends much of his time testing the blood of humans such as hunters of bushmeat who are in constant contact with such animals.

One technology he considers promising is the “lab on a chip”. Researchers around the world are now

working to develop portable, fast and affordable ways of analysing samples out in the field. Dr Wolfe thinks he will soon have a device that will identify an unknown bug by using advanced genetic analysis.

On the spot

Dr Wolfe sees great potential in the mobile phone. When he visits remote parts of Congo not connected by road or electricity grid, he often finds that locals are able to use a mobile-phone service, recharging their phones at night using portable generators. His team is developing a software system to offer hunters a tiny financial reward to send an SMS message letting him know when they are ill, which would provide a useful early warning. Health workers would then be sent to test the ailing person to see if there is cause for alarm.

Global-health visionaries are now pondering a much more interactive smart grid that can make sense of that hunter's initial warning. One possible technology is Frontline SMS, a free application that allows health officials to analyse a huge flood of text messages without the need for central servers or internet access.

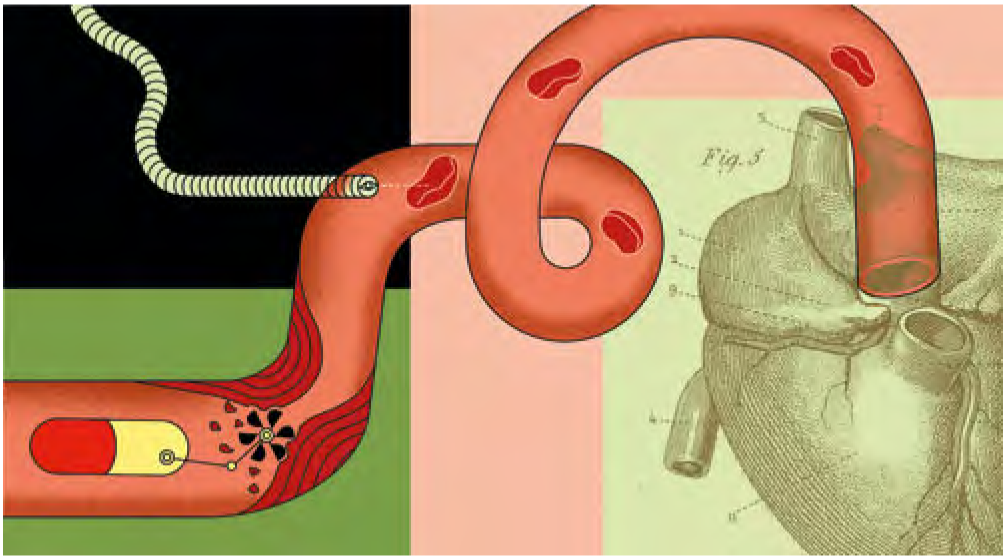
Eric Rasmussen, chief executive of InSTEDD, a not-for-profit software developer in California, believes that "first-world solutions simply won't work in places with constrained resources and intermittent connectivity." For a global surveillance system to be robust, he says, it must provide the people closest to the trouble with the information and authority they need to act swiftly. His outfit has created an open-source application that puts together data from disparate mobile sources and combines it with maps and other data to be used by field workers to act on a warning. Rockefeller, along with the UN Foundation and others, is now encouraging such mobile innovators to agree on best practices and common standards to allow the most promising ideas to spread easily, quickly and widely. "If the internet is humanity's planetary nervous system, we are now building our planetary immune system," says Dr Wolfe.

Fantastic Voyage

Apr 16th 2009
From The Economist print edition

Technology is making health care more portable, precise and personal

Illustration by Otto Steininger



HALF a century ago, in a film called “Fantastic Voyage”, a tiny Raquel Welch and her team were sent into a dying patient’s body in a nano-submarine to save his life. Technology has still not advanced quite that far, but today’s sophisticated devices and diagnostics are getting ever closer.

At the university hospital in the German city of Aachen, near the border with Belgium and the Netherlands, complex heart surgery that would once have required a lengthy and costly hospital stay has been turned into a routine procedure. Harald Kühl, a professor of cardiology at the hospital, says that patients who have been given heart-valve replacements in the morning are now usually back on their feet the same evening and discharged the next day.

The main operating room in Aachen is larger than normal and crammed full of advanced imaging technologies. In collaboration with Philips, a Dutch electronics giant, the researchers have fused together X-ray, ultrasound and magnetic-resonance scanners that provide detailed images of people’s innards in real time. That allows them to perform precise operations using techniques that leave virtually no scars. Even less invasive is “natural orifice” surgery. In America a woman’s gallbladder was recently removed by surgical and optical tools that entered her body through her vagina.

Robotics is also making surgery more precise. Futurists at the Stanford Research Institute in California have developed robots that are used to perform remote surgery on wounded soldiers near the battlefield. Da Vinci robots are now regularly used to carry out delicate operations, such as those for prostate cancer. These are large machines, but robots are getting smaller. Lord Darzi, a British health minister and professor at Imperial College, thinks the next wave will be micro-sized, with tiny motors that can roam around the body and deliver radio waves to kill tumours. In a decade, he says, nano-robots will operate at the molecular scale.

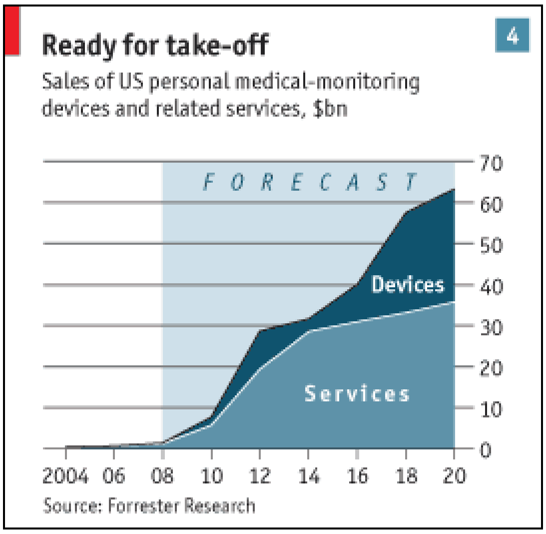
But high-tech applications are no longer automatically seen as a good thing. The proliferation of machinery such as fancy scanners, once applauded, is now criticised as a main cause of runaway health costs. National health systems, private insurers and others who hold the purse strings increasingly demand that innovation be linked clearly to economic value and improved health outcomes. Paul Yock of Stanford’s bio-design programme says that innovators must now start with the medical need rather than inventing nifty kit and then searching for an application.

The advances in genomics and information and communications technologies discussed earlier in this

report matter because they are enabling other fields—including nanotechnology, robotics, molecular diagnostics and micro-fluidics—that had previously made slow progress in health care to advance much more rapidly.

Taken as a whole, all this has meant a big shift in care away from a centralised model that puts the physician at its core to a smarter, more decentralised approach centred on the patient. This shift also opens up new ways of coping with the huge problems of ageing populations and surges in chronic ailments such as diabetes and heart disease. The result will be a more portable, precise and personal way to deliver health care.

Traditionally, most important diagnostic tests have been done on big, expensive machines in central laboratories. Usually the patient gives a sample one day and then has to return another day to see the doctor and discuss the results.



This is inconvenient enough for patients in the rich world, says Mr Gates, but in developing countries it is often unfeasible. Patients there typically lose a day's work as they walk to distant medical clinics and cannot afford to lose another day to return for the results.

The doctors' dilemma is that there is no quick and reliable test for certain diseases, such as malaria, so in sub-Saharan Africa malaria medicine is automatically dispensed to children displaying malaria-like symptoms. But retrospective studies have shown that many of those children did not, in fact, have the disease. The lack of a quick test therefore means that precious antimalarial drugs are wasted and other illnesses may go untreated.

You can take it with you

Fortunately, portable and rapid diagnostic tools are on the way, says Gary Cohen of Becton, Dickinson (BD), an American diagnostics giant. His firm believes that a new type of diagnostic toolkit is emerging, thanks to the fusion of genomics, proteomics (which analyses specific proteins) and information technologies. The impact of such "point of care" diagnostics will be as big as that of mobile phones, extending the reach of modern medicine to places that are underserved or unserved today.

Big companies like GE, BD and Philips are investing heavily in this area, but some surprising advances are coming from start-ups too. One firm has produced a cheap testing kit that can be thrown away after use. Diagnostics for All, started by students at MIT and Harvard, has developed a range of diagnostic tests that are printed on ordinary paper. The key is the use of micro-fluidics technology to direct the sample (say, a drop of blood) through tiny grooved channels to various chambers. Chemicals then react with the sample, providing rapid diagnostic results.

Ustar Biotechnologies, a Chinese start-up, has developed a cheap and portable diagnostic kit that it is marketing with BioHelix, a Boston-based firm. Qimin You, its inventor and Ustar's founder, graduated in North America and worked for Western multinationals for many years. His proposals for cheap diagnostic technologies were turned down by firms unwilling to undermine their existing products, so he left to set up his own firm in China.

"We've got the technology, and nobody can compete with us on cost," he declares, forecasting a great future for such devices in rich and poor countries alike. Robert Harrison, head of the Clinton Global Initiative, a charity started by Bill Clinton, agrees. His organisation has encountered many similar firms from developing countries now researching, designing and manufacturing medical technology locally, which helps to ensure that solutions are best suited to local conditions.

A guided missile

More established rivals are not standing still. Stephen Oesterle, chief medical officer of Medtronic, a large

medical-devices firm, argues that the miracle cures promised by biotechnology will depend on much more targeted drug delivery. Old-fashioned pills were swallowed and absorbed through the gut, but that does not work for biotech drugs because stomach acid would wipe them out. His firm is investing in implanted pumps, precision devices and other clever ways of putting medicine where it is meant to go.

Philips has developed a way for drugs to be encapsulated in bubbles made of biodegradable polymers that can be delivered to a tumour like a guided missile. Selecta BioSciences, an American firm, is testing biodegradable nanoparticles, a technology developed by MIT's Dr Langer that it hopes to use to target lymph nodes.

Another new way of targeting drugs involves the use of a specially designed silicon chip that is able to store and release drugs on demand. When a remote wireless signal is sent, a tiny electrical current zaps the chip to release the desired quantity of the drug. The first generation of such chips, made by MicroCHIPS, an American firm, tackles diabetes. It will go to clinical trials this year and is expected to be commercialised in four years. Future applications will include chips that monitor patients at home for signs of a heart attack or hypoglycaemia and can release the appropriate life-saving drugs. John Santini, the boss of MicroCHIPS, believes that over the next decade devices will increasingly interact with the body and communicate medical data directly to portable devices or EHRs, thus helping patients to manage their own chronic diseases.

For several decades now, visionaries have tried to shift the medical model from expensive hospital interventions for sick people to cheaper preventive care in the home. They have promoted ideas ranging from kiosks for long-distance medical consultations to smart toilets that tell your doctor about the blood-sugar levels in your urine. Most of these ideas have failed.

James Sweeney is one of the few entrepreneurs to have achieved commercial success, not once but half a dozen times, with businesses selling personal medical devices. His current firm, America's IntelliDOT, makes small wireless devices used for medical monitoring.

He says the biggest difficulty he has had to confront is not the limits of technology but the unwillingness of insurance companies and health systems to reward innovators for products that keep patients at home, where monitoring and care can be provided more easily and cheaply than at the doctor's surgery. But even this grizzled veteran thinks the tipping point for personalised medical devices has arrived, for three reasons.

First, thanks to much-improved technologies for remote communications, "telemedicine" is at last taking off. Second, thanks to cheap and ubiquitous consumer electronics, medical devices in the home are at last moving beyond clunky medical monitors and creepy lavatories. Third, cheap sensors and smart phones are allowing a shift to "body computing".

Two different kinds of telemedicine are being tried out in Britain. In three locations in England the NHS is now running one of the largest trials of "telecare", which aims to monitor and offer remote medical care to the elderly in their homes. The Scottish Centre for Tele-Health has set up video kiosks offering medical consultations in remote areas to minimise the need for travel to distant hospitals. A trial concluded last month using video equipment made by Cisco, an American technology firm, found that doctors and patients considered this high-tech version of care to be as effective as personal consultations.

Coming to a village green near you

The Mayo Clinic, another American hospital chain offering integrated care, is also running a number of trials. Kaiser Permanente already offers remote medical consultations to its patients in Hawaii, and conducts dermatological examinations this way in California. India's Apollo hospitals regularly use remote video links to connect specialists with distant facilities. And Aravind Eye Hospitals, another pioneering Indian chain, has set up many remote eye-care kiosks in villages.

The sophisticated equipment in Aravind's kiosks is run by well-trained local women, not expensive and elusive doctors. Once an eye test is completed, the patient and all his digitised data are linked by internet video to a physician at the main hospital who decides whether the patient just needs spectacles (made on the spot) or has to go to the hospital.

Christofer Tomazou of Imperial College, a pioneer in this field, argues that devices and diagnostics could transform chronic care if they can leave behind their baggage of "clunky electronics and Big Brother

monitoring methods".

Dr Oesterle of Medtronics, a market leader in fields such as remote monitoring of patients with pacemakers, says that cheap "consumer-grade" electronics now make it possible to produce such devices as disposable insulin pumps, which his firm plans to start selling soon. As more such devices win consumer acceptance, care will get both cheaper and better. His firm might become a provider of services as well as hardware.

For his part, Dr Tomazou believes the future belongs not to medical devices enhanced by consumer electronics but to ubiquitous and user-friendly devices like personal digital assistants and mobile phones. These are "very useful for hiding medical monitoring" and for displaying data in ways that enable patients to act on that information. Qualcomm, which makes wireless-communications equipment, thinks a good way to do this is to integrate advanced sensors and short-range wireless networks (known as "femtocells") to create "home health hubs".

On April 2nd Intel announced a $250m joint venture with GE to market a range of snazzy internet-connected devices that allow doctors to monitor patients at home. The company also helped organise a consortium of companies, known as the Continua Health Alliance, that has produced standards on "interoperability" and communications for such products.

Tim Brown of Ideo, a design consultancy, goes further, arguing that in future "medical devices for the home will simply disappear into our built environment, our consumer products, our clothing or even our bodies." Philips has already developed bedsheets with metal strands woven into them to allow a patient's heart to be monitored as he sleeps. Dozens of firms, from clothing and shoe manufacturers to consumer-electronics firms, are developing other such "body-computing" tools, both for health applications and for sports.

Devices that will be deployed inside the body are just around the corner. Proteus Biomedical, a Californian firm, has developed a tiny computer chip that can be put inside a normal pharmaceutical pill. This "smart pill" sends an electrical signal when, for example, it is swallowed by a patient. The message is read and stored by electronic equipment inside a small bandage worn by the patient. That information can be downloaded from time to time, or beamed wirelessly to a device in the home that e-mails the patient's doctor.

The point is to monitor the patient's health and ensure compliance with drug regimens. This matters, because studies have shown that patients often fail to take medication as instructed, sometimes with fatal results. The first clinical trial will be of smart pills for tuberculosis. Proteus Biomedical's boss, Andrew Thompson, sees scope for applications to tackle counterfeiting and even interactions between drugs.

Wait for the catch

Like all things that sound too good to be true, these technologies have a catch. The torrent of medical data that will be generated by all these smart devices will need to be analysed. Software can help by sending summaries and alerts, but Kaiser Permanente's Yan Chow thinks "technology is running ahead of our capacity to absorb it." For instance, will doctors be legally obliged to act on that information? Still, he is an enthusiast. Moments later he is gushing about a devious software program designed for the Nintendo Wii, a popular videogaming system, that has proved highly effective in getting recalcitrant children to stick to physical-therapy regimens.

The bigger concern is that technology can never be a substitute for personal responsibility. As Mr Gates points out, "bathroom scales have been around a long time and obesity is still on the rise." Yet there is no denying that the medical technologies now rapidly moving towards commercialisation have the potential to empower patients and give them the tools and data needed to take charge of their own health. This is already beginning to happen.

Health 2.0

Apr 16th 2009
From The Economist print edition

How far can interactive digital medicine go?

Illustration by Otto Steininger

THE advances in digital medicine described in this special report have already started to move patients from the margins of the medical system to its centre. Some think there are bigger things to come. “The key is patient-driven research,” explains Gregory Simon, head of Faster Cures, an advocacy group in Washington, DC. Most of the push for adopting electronic health records has come from institutions anxious to cut costs and reduce medical errors, but he thinks the biggest gains will come in the shape of better treatments for difficult diseases. He sees patients increasingly getting together online and sharing medical data and treatment histories.

On a website called PatientsLikeMe, members from around the world swap stories about their ailments and discuss subjects like adverse drug interactions, dosing strategies, new drugs and trials for more than a dozen diseases. A report by the California HealthCare Foundation, a think-tank, argues that in dealing with multiple sclerosis, a neurological disorder for which there is as yet no cure, “the collective wisdom on this website may rival the body of information that any single medical school or pharmaceutical company has assembled in the field.”

Mr Brown of Ideo argues that until recently the flow of information in medicine has tended to be one way. In future, he thinks, medical knowledge will increasingly flow in many directions. Mr Brown points to a proliferation of health blogs, online groups and peer-to-peer portals as a sign that the age of social networking in medicine has arrived. Google already has a feature that allows users of its EHRs to share their health information with others.

It is easy to be sceptical about such online communities. A fatal illness will not be cured by Twittering about it. And for many people nothing will replace the personal relationship between a patient and his doctor. But it seems clear that patients are going online to get more information on their illness, to see what other consumers think of new medications and to get emotional support from fellow sufferers.

Good for them, good for us

Even doctors, who may seem to have the most to lose from patient-centred digital medicine, increasingly support the move online. Many of them are themselves keen users of secure medical chat rooms. Thomas Lee of Partners Community Healthcare thinks such social networking helps make up for the “water-cooler chats” of yesteryear that allowed doctors to exchange knowledge across specialisations.

How far could all this go? Neil Seeman, who runs a health-strategy innovation group at the University of Toronto’s Massey College, thinks that “Health 2.0” is important “because it reinvents how we identify opinion leaders and exploit disruptive innovation.” His research has shown that the most active communities on social networks such as MySpace concentrate not on celebrity gossip or sport but on chronic illness—especially stigmatised conditions like depression.

The most influential health blogs on the web, he finds, are those that offer people with chronic illnesses medically relevant and accurate information. One post from a trusted surgeon blogger, he says, now has a far more immediate impact on improving surgical care globally than a peer-reviewed trial published in a prestigious journal. WebMD and America’s Centres for Disease Control (CDC), standard-bearers of the old model of one-way information flow online, are now offering social networking tools like blogs and wikis.

CDC even has a presence on Second Life, an online virtual-reality game.

One man who has seen all this before is Steven Case. He founded America Online, a pioneering internet firm, and made a fortune selling it to Time Warner just before the technology-stock bubble burst. A few years ago he became convinced that the next big thing on the internet was health, so he launched Revolution Health, which after recent acquisitions has become the biggest online health firm. The firm's early efforts were slow to develop, he concedes, in part because health care is a conservative business and the financial-reimbursement models in health care are extremely convoluted.

But Mr Case remains convinced that digital medicine will take off. As people live longer and spend an ever larger proportion of their income on health, he says, "the consumer will demand to know and will want to be empowered." He likens the current state of digital medicine to the heady days of the late 1970s when Apple ushered in the age of personal computing.

Doctors are quick to point out that transistors are not the same as transplants. Medicine is more complex than electronics or even the internet. And there are a number of things about established medical practice that are to be cherished and not recklessly cast aside in the name of change.

Reformation, not revolution

That is why it may make more sense to see the move to digital medicine as a reformation rather than a revolution. In an issue of the *British Medical Journal* which was devoted largely to this topic last month, Joanne Shaw, a prominent figure in the British medical establishment, argues that "traditional paternalistic relationships between patients and doctors are being undermined in much the same way as the religious Reformation of the 16th century empowered the laity and threatened the 1,000-year-old hierarchy of the Catholic church in Europe. The Reformation had irreversible consequences for Western society; the implications of the health-care reformation could also be profound." Fiona Godlee, the journal's editor, agrees with her that the shift towards patient empowerment is "unstoppable".

As bottom-up digital medicine arrives in full force, it will at last provide reformers with the tools they need to tackle the great health-care challenges of this century: dealing with the cost of chronic care for the ageing populations of the rich world and helping the weak health systems in poor countries tackle deadly diseases.

Sources and acknowledgments

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Health care in India

Lessons from a frugal innovator

Apr 16th 2009 | BANGALORE
From The Economist print edition

The rich world's bloated health-care systems can learn from India's entrepreneurs

Tom Pietrasik

ENTER the main cardiac operating-room at Bangalore's Wockhardt hospital on a typical morning, and you will find a patient on the operating table with a screen hanging between his head and chest. On a recent visit the table was occupied by a middle-aged Indian man whose serene look suggested that he was ready for the operation to come. Asked how he was, he smiled and answered in Kannada that he felt fine. Only when you stand on a stool to look over the screen do you realise that his chest cavity has already been cut open.

As the patient was chatting away, Vivek Jawali and his team had nearly completed his complex heart bypass. Because such "beating heart" surgery causes little pain and does not require general anaesthesia or blood thinners, patients are back on their feet much faster than usual. This approach, pioneered by Wockhardt, an Indian hospital chain, has proved so safe and successful that medical tourists come to Bangalore from all over the world.

This is just one of many innovations in health care that have been devised in India. Its entrepreneurs are channelling the country's rich technological and medical talent towards frugal approaches that have much to teach the rich world's bloated health-care systems. Dr Jawali is feted today as a pioneer, but he remembers how Western colleagues ridiculed him for years for advocating his inventive "awake surgery". He thinks that snub reflects an innate cultural advantage enjoyed by India.

Unlike the hidebound health systems of the rich world, he says, "in our country's patient-centric health system you must innovate." This does not mean adopting every fancy new piece of equipment. Over the years he has rejected surgical robots and "keyhole surgery" kit because the costs did not justify the benefits. Instead, he has looked for tools and techniques that spare resources and improve outcomes.

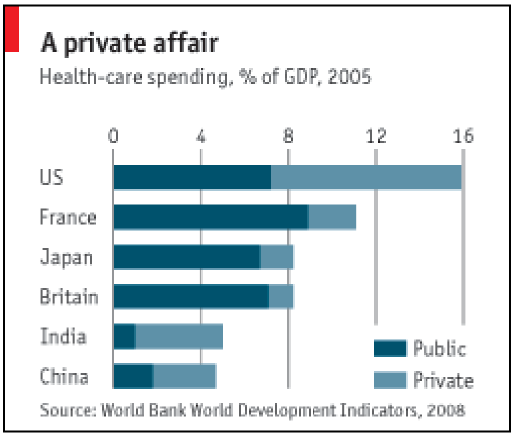
Shivinder Singh, head of Fortis, a rival hospital chain based in New Delhi, says that most of the new, expensive imaging machines are only a little better than older models. Meanwhile, vast markets for poorer patients go unserved. "We got out of this arms race a few years ago," he says. Fortis now promises only that its scanners are "world class", not the newest.

Mr Singh is not alone in thinking that many firms in the rich world are looking at innovation the wrong way. Paul Yock, head of the bio-design laboratory at Stanford University, which develops medical devices, argues that medical-technology giants have "looked at need, but been blind to cost." Amid growing

concern about runaway health spending, he thinks the industry can find inspiration in India.

Poverty, geography and poor infrastructure mean that India faces perhaps the world's heaviest disease burden, ranging from infectious diseases, the traditional scourge of the poor, to diseases of affluence such as diabetes and hypertension. The public sector has been overwhelmed, which is not surprising considering how little India's government spends on health as a share of national income (see chart). Accordingly, nearly four-fifths of all health services are supplied by private firms and charities—a higher share than in any other big country.

In the past that was more a reflection of the state's failure than the dynamism of entrepreneurs, but this is changing fast. Technopak Healthcare, a consulting firm, expects spending on health care in India to grow from $40 billion in 2008 to $323 billion in 2023. In part, that is the result of the growing affluence of India's emerging middle classes. Another cause is the nascent boom in health insurance, now offered both by private firms and, in some cases, by the state. In addition, the government has recently liberalised the industry, easing restrictions on lending and foreign investment in health care, encouraging public-private partnerships and offering tax breaks for health investments in smaller cities and rural areas.



Cheaper and smarter

This has attracted a wave of investment from some of India's biggest corporate groups, including Ranbaxy (the generic-drugs pioneer behind Fortis) and Reliance (one of India's biggest conglomerates). The happy collision of need and greed has produced a cauldron of innovation, as Indian entrepreneurs have devised new business models. Some just set out to do things cheaply, but others are more radical, and have helped India leapfrog the rich world.

For years India's private-health providers, such as Apollo Hospitals, focused on the affluent upper classes, but they are now racing down the pyramid. Vishal Bali, Wockhardt's boss, plans to take advantage of tax breaks to build hospitals in small and medium-sized cities (which, in India, means those with up to 3m inhabitants). Prathap Reddy, Apollo's founder, plans to do the same. He thinks he can cut costs in half for patients: a quarter saved through lower overheads, and another quarter by eliminating travel to bigger cities.

Columbia Asia, a privately held American firm with over a dozen hospitals across Asia, is also making a big push into India. Rick Evans, its boss, says his investors left America to escape over-regulation and the political power of the medical lobby. His model involves building no-frills hospitals using standardised designs, connected like spokes to a hub that can handle more complex ailments. His firm offers modestly priced services to those earning $10,000-20,000 a year within wealthy cities, thereby going after customers overlooked by fancier chains. Its small hospital on the fringes of Bangalore lacks a marble foyer and expensive imaging machines—but it does have fully integrated health information-technology (HIT) systems, including electronic health records (EHRs).

New competitors are also emerging. A recent report from Monitor, a consultancy, points to LifeSpring Hospitals, a chain of small maternity hospitals around Hyderabad. This for-profit outfit offers normal deliveries attended by private doctors for just $40 in its general ward, and Caesarean sections for about $140—as little as one-fifth of the price at the big private hospitals. It has cut costs with a basic approach: it has no canteens and outsources laboratory tests and pharmacy services.

It also achieves economies of scale by attracting large numbers of patients using marketing. Monitor estimates that its operating theatres accommodate 22-27 procedures a week, compared with four to six in other private clinics. LifeSpring's doctors perform four times as many operations a month as their counterparts do elsewhere—and, crucially, get better results as a result of high volumes and specialisation. Cheap and cheerful really can mean better.

But there is more to India's approach than cutting costs. Its health-care providers also make better use of HIT. According to a recent study in the *Journal of the American Medical Association*, fewer than 20% of doctors' surgeries in America use HIT. In contrast, according to Technopak, nearly 60% of Indian hospitals do so. And instead of grafting technology onto existing, inefficient processes, as often happens in America, Indian providers build their model around it. Apollo's integrated approach to HIT has enabled the chain to

increase efficiency while cutting medical errors and labour. EHRs and drug records zip between hospitals, clinics and pharmacies, and its systems also handle patient registration and billing. Apollo is already selling its expertise to American hospitals.

Eye on the prize

A casual visitor to Madurai, a vibrant medieval-temple town in southern India, would not think it was a hotbed of innovation. And yet that is exactly what you will find at Aravind, the world's biggest eye-hospital chain, based in the town. There are perhaps 12m blind people in India, with most cases arising from treatable or preventable causes such as cataracts. Rather than rely on government handouts or charity, Aravind's founders use a tiered pricing structure that charges wealthier patients more (for example, for fancy meals or air-conditioned rooms), letting the firm cross-subsidise free care for the poorest.

Aravind also benefits from its scale. Its staff screen over 2.7m patients a year via clinics in remote areas, referring 285,000 of them for surgery at its hospitals. International experts vouch that the care is good, not least because Aravind's doctors perform so many more operations than they would in the West that they become expert. Furthermore, the staff are rotated to deal with both paying and non-paying patients so there is no difference in quality. Monitor's new report argues that Aravind's model does not just depend on pricing, scale, technology or process, but on a clever combination of all of them.

C.K. Prahalad and other management gurus trumpet examples like Aravind, but do the rich countries accept that they could learn from India? Unsurprisingly, some reject the notion that America's model is broken. William Tauzin, head of America's pharmaceutical lobby, warns that regulatory efforts to cut costs could stifle life-saving innovation. Sandra Peterson of Bayer, a German drugs and devices giant, stoutly defends the industry's record. She argues that overall cost increases mask how medical devices, "like cars or personal computers, give better value for the money over time." Diabetes monitors and pacemakers have improved dramatically in the past 20 years and have fallen in price—but costs have gone up because they are now being used by more patients.

But those examples are exceptions. Many studies show that America's spending on health care is soaring, yet its medical outcomes remain mediocre. Mark McClellen of the Brookings Institution, an American think-tank, says that a big problem is the overuse of technology. Whether or not a scan is needed, the system usually pays if a doctor orders it—and the scan might help defend the doctor against a malpractice claim. "The root cause is not greed, but tremendous technological progress imposed upon a fractured health system," says Thomas Lee of Partners Community HealthCare, a health provider in Boston.

Dr McClellen, a former head of America's Food and Drug Administration, points out that other innovative industries often sell new products at a loss, and recoup their investments later. In genuinely competitive industries, innovators are rarely rewarded with the "cost plus" reimbursements demanded by medical-device makers for their gold-plated gizmos.

That is why Stanford's Dr Yock wants to turn innovation upside down. He has extended his bio-design programme to India, in part to instil an understanding of the benefits of frugality in his students. He believes that India's combination of poverty and outstanding medical and engineering talents will produce a world-class medical-devices industry. Tim Brown, the head of Ideo, a design consultancy, agrees. In the past, he notes, health bosses thought all devices had to be Rolls-Royces or Ferraris. But cost matters, too. Pointing to another recent example of India's frugal engineering, he says: "In health care, as in life, there is need for both Ferraris and Tata Nanos."

Business in India

Salvaging the truth

Apr 16th 2009 | DELHI
From The Economist print edition

Satyam, India's disgraced technology firm, finds a buyer

GETTING paid in pounds is not what it was. Almost 70% of the revenues booked by Tech Mahindra, an Indian technology company, are in sterling. This is largely because BT, a British telecoms operator which owns a 31% stake in the firm, also accounts for 57% of its custom. This has left Vineet Nayyar, Tech Mahindra's chief executive, bemoaning the "precipitous decline" in the pound.

But on April 13th Tech Mahindra made a dramatic move into fresh industries, new countries and harder currencies. It did so by winning an auction to buy Satyam, a disgraced software-and-services company. Satyam, which means "truth" in Sanskrit, an ancient Indian language, once belonged to the highest ranks of India's most celebrated industry. But it now stands as the country's biggest corporate fraud. On January 7th its founder and chairman, B. Ramalinga Raju, confessed to falsifying the company's accounts for years, inflating revenues and fabricating cash balances of about $1 billion that did not exist.

Tech Mahindra outbid two rival suitors, including the favourite, Larsen & Toubro (L&T), an Indian engineering giant which already held a 12% stake in its target. Having previously overpaid for some of Satyam's shares (it bought 4% of the company before Mr Raju's confession), L&T was reluctant to bid more than 49.50 rupees ($0.99) per share in the opening round. It assumed it would get a chance to raise its bid, as the auction rules allowed, as long as its first offer was within 10% of the highest bid. But Tech Mahindra opened with a price of 58 rupees, depriving L&T of any opportunity to make a counter-offer.

Tech Mahindra's bid values Satyam at 56.65 billion rupees. This is less than a third of its stockmarket value before Mr Raju's confession, but is it more than the firm is worth? It will be months before KPMG and Deloitte Touche Tohmatsu finish picking through Satyam's books, separating fact from fiction. The company has lost about 5,000 of its 53,000 employees in the past two quarters, according to one of the six directors appointed by the government to salvage the company. In March the *Economic Times*, an Indian newspaper, reported that Satyam had also forfeited 46 customers, including Nissan and Sony. The United Nations Secretariat has cancelled its contract, as has State Farm Insurance, a longstanding customer.

But it could have been worse. In the midst of a global recession, most clients have other things on their minds. Few want to devote scarce time and energy to switching suppliers with all the rejigging of computer systems that entails. Tech Mahindra reckons Satyam's annual revenues will amount to about $1.3 billion, and believes it can increase Satyam's operating margins, which are thinner than its own.

Satyam still carries some legal baggage. Holders of its American Depository Receipts have filed a class-action suit in America. Upaid, a British mobile-payments firm, is seeking damages in an intellectual-property dispute that predates Mr Raju's confession. Even members of Mr Raju's own family claim Satyam owes them money. At one point all this was enough to deter Tech Mahindra. "It is mired in a huge amount of litigation and it is not something we are pursuing," Mr Nayyar told analysts on January 23rd.

What changed his mind? Tech Mahindra belongs to the Mahindra group, a sprawling conglomerate that sells everything from sport-utility vehicles and tractors to housing loans and baby clothes. But its technology division has always been a hedgehog, not a fox: it knows a lot about one thing. An analyst describes it as a paralysed organisation, overly dependent on one industry (telecoms) and one client (BT). If Satyam can liberate its new buyer from this niche, even as Tech Mahindra frees Satyam from its stigma, it will be a happy result for both companies.

It would also be a relief for the industry. The board appointed by the government did a commendable job of shepherding Satyam through a potentially fatal period. Indeed, the Satyam episode arguably demonstrates the worst and the best of Indian management. Mr Raju's pride jeopardised the careers of tens of thousands of bright, dedicated professionals. The six members of the government-appointed board, by contrast, carried out their duty, despite the upheaval in their personal lives and the risk to their

reputations.

As for Mr Raju, he awaits trial in Chanchalguda Central Prison in Andhra Pradesh, his home state. It is still not clear whether his confession was as full and frank as he claimed. On April 20th India’s Central Bureau of Investigation will seek the court’s permission to subject Mr Raju to a lie-detector test, which will include mapping his brain. That may be the only place where a true and fair view of Satyam’s accounts can be found.

MGM Mirage

Dicing with debt

Apr 16th 2009 | LAS VEGAS
From The Economist print edition

A gigantic bet goes sour

"THE sort of project God would build if he had the money." That is how the boss of one of MGM Mirage's rivals once described the American casino operator's $8.6 billion-8.7 billion CityCenter development on the Las Vegas Strip. Now MGM Mirage's managers may be praying for divine intervention to help get them out of trouble. A legal spat and a dire economy have turned CityCenter, one of the world's most ambitious real-estate projects, into a nightmare just as the casino giant grapples with a $13.5 billion debt burden that threatens to tip it into bankruptcy.

This week brought a sliver of good news for the company. On April 13th MGM Mirage said its bankers had agreed to amend loan agreements to let it pay $70m of construction costs for CityCenter due by the end of the week. That will keep work going on the 67-acre site of hotels and casinos. But MGM Mirage and its partner in the 50-50 joint venture, Dubai World, are at loggerheads. The investment firm has sued MGM Mirage, accusing its managers of letting costs spiral out of control. The casino operator says its partner approved all budgets for the project, which is due to open at the end of the year.

In March Dubai World refused to provide its half of a $200m payment due for CityCenter, leaving MGM Mirage to pick up the whole tab. This week's deal with its banks means the casino operator can pay the latest instalment on the project in full, even if its partner refuses to pay up once again. Dubai World has said it is committed to CityCenter, but wants reassurance that MGM Mirage—and the banks lined up to lend $1.8 billion to the project—will honour their commitments.

Dubai World has good reason to fret about MGM Mirage: last month the casino firm said it was struggling to stay in compliance with the terms of its loan agreements. Revenues have plummeted as punters have cut back on their gambling or stayed away altogether. MGM Mirage recently sold its Treasure Island casino on the Strip to raise some badly needed cash.

MGM Mirage isn't the only one reeling. Many casino firms, including Harrah's Entertainment and Station Casinos, gorged on debt to finance expansion in the belief that Las Vegas would be impervious to a downturn. They were wrong: according to Nevada's Gaming Control Board, gambling revenues fell by almost 10% last year, by far the steepest drop since records began 54 years ago. A glut of rooms has also dented firms' income. If CityCenter opens on time, it will make this situation worse. "It's going to cannibalise everyone's business," warns Dennis Forst, an analyst with KeyBanc Capital Markets.

In response, casino owners are desperately trying to reduce their borrowings. On April 9th Harrah's announced a deal that sliced almost $1.9 billion off its debt, according to an estimate by CreditSights, a research firm. MGM Mirage is devising a plan to slash its own debt. It is considering selling more casinos and restructuring some loans. With luck, it will avoid bankruptcy. But don't bet on it.

Nintendo

Playing a new game

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From The Economist print edition

Japan's video-gaming champion branches out in search of growth

CRUSHING competitors while racing past obstacles is the basis of many video games. Nintendo, the most successful of the three big games-console makers, has done just that in the past few years. Cumulative sales of its Wii console, launched in 2006, recently surpassed 50m—about as many as Sony's PlayStation 3 (PS3) and Microsoft's Xbox 360 combined. The Nintendo DS, meanwhile, is the bestselling hand-held games device. Over 100m have been sold—more than twice as many as Sony's PlayStation Portable.

With both the Wii and the DS, Nintendo has prospered by promoting simple, accessible games that have far broader appeal than the more elaborate titles typically found on rival consoles. As a form of cheap, stay-at-home entertainment, gaming is one of the few industries to have done well during the recession. But now there are signs that things are about to get much more difficult for Nintendo.

Though Nintendo's sales remain strong in America and Europe, they are starting to sag in Japan. Sales of Sony's PS3 surpassed those of the Wii in March, and Wii sales have been on a downward trend for a year. This is ominous, because Japan's gaming market is often a harbinger of global trends. "The Wii is in its most unhealthy condition since it hit the Japanese market," admits Satoru Iwata, Nintendo's boss.

The worry is that the new gamers Nintendo has lured into the market with its easy-to-use consoles—the DS uses a touch-screen and a stylus, and the Wii uses motion-sensitive controllers—are less committed to gaming when times get tough, and buy fewer new games. The success of the Wii and the DS may also have saturated the market. If so, new must-have software titles or hardware features will be needed to entice buyers back.

To revitalise Nintendo in the short term, Mr Iwata is banking on new games such as "Wii Sports Resort", due in June (and in July outside Japan). A follow-up to the Wii's popular sports games, it lets players ride jetskis, play Frisbee with a dog and fence with virtual swords. It will come with an accessory that increases the accuracy of the Wii's motion-sensitive controller and will open up new possibilities. Big games publishers are increasing their budgets to produce titles for the Wii, notes Atul Goyal of CLSA, a broker.

Looking towards the longer term, meanwhile, Nintendo is shifting its strategy by moving beyond gaming. It plans to launch a video-on-demand service for the Wii. And this month the DSi, the latest version of the dual-screen gadget, went on sale in America and Europe, selling 600,000 units in the first two days. More than 2m have been sold in Japan since November. The DSi incorporates two cameras, a simple music-player, a web browser and the ability to download software. Nintendo is quietly testing it for use as a museum guide and an educational tool. Instead of selling one unit per household as with the Wii, Nintendo wants to sell one DSi per family member, explains Shigeru Miyamoto, the firm's game-design guru.

Branching out beyond gaming will be risky. Nintendo will face competition from makers of mobile phones, music players and other consumer-electronics gear. But it may not have much choice. Multi-function "smart phones" are proliferating, and Apple's iPhone is becoming increasingly popular as a portable gaming device. Mr Iwata hopes integrating the Wii and the DS will give Nintendo an edge: it will be possible to transfer downloaded video from a Wii to a DS, for example. Nintendo will remain strong in gaming, says Hirokazu Hamamura of Enterbrain, a market-research firm. But moving beyond its core market will be a different game entirely.

Internet regulation in France

Trois strikes and you're out

Apr 16th 2009 | PARIS
From The Economist print edition

Will France pass a controversial law against file-sharing?

Illustration by S. Kambayashi

HOLLYWOOD's bible, *Variety* magazine, always refers to France as Gaul, a "land of wine, baguettes and *amour*". But America's media industry may soon start taking France more seriously. The French government is trying to pass a harsh new law that would cut off internet access for people who download pirated music and films. Media bosses reckon other countries might follow suit.

France's proposed law would create a new government agency called HADOPI to police the internet on behalf of copyright owners. It would force internet-service providers (ISPs) to reveal the identities of users downloading copyrighted material, and would send them two warnings: the first by e-mail, the second by registered letter. If users continued to download such material, the ISP would cut off their broadband access for up to a year and put them on a blacklist to stop them subscribing elsewhere.

HADOPI was due to start sending out warnings in July. But on April 9th, in a surprise vote, the lower house of France's parliament rejected the law. Only 15 members of President Nicolas Sarkozy's ruling UMP party, which wrote the bill, turned up for the final vote, which is usually just a matter of procedure—both houses of parliament had already approved the law's main elements. At the last moment a group of Socialist members rushed in to oppose it, resulting in a 21-15 defeat. According to *Libération*, a French newspaper, the Socialists had hidden behind heavy curtains in the entrance to the parliamentary chamber.

Opponents of the law hope this defeat might be enough to kill it. The low turnout by the UMP, they argue, suggests that many in Mr Sarkozy's own party are afraid of backing a measure that is highly unpopular, particularly among young people. Music and film companies, meanwhile, are confident that the law will eventually pass. Mr Sarkozy is determined to push it through parliament later this month. He first met his wife, Carla Bruni, a musician who has supported the law, at a presentation of a report on internet piracy by Denis Olivennes, former boss of Fnac, a retailer. Mr Olivennes's report led directly to the HADOPI law.

Even if it is adopted, argues Pierre Kosciusko-Morizet, the head of ACSEL, a group representing French internet firms, the new law will be ineffective. Downloaders will sign up for anonymised and encrypted internet connections, he suggests, and will download content from people outside France, who are beyond the reach of the law.

Germany, worried about privacy, recently decided against adopting a similar law. But Italy's government has said that it might copy the French. Britain is thought to be moving towards something similar; last year it declared its intention to reduce illegal file-sharing by 70-80% in the next two or three years. Best keep an eye on goings-on in Gaul.

Business in Iraq

It's the economy, stupid

Apr 16th 2009
From The Economist print edition

American investors attempt to spur Iraq's private sector

Reuters

Out with the tanks, in with the tomatoes

IN 2005 on a dusty road in Tuz, Iraq, an American solder was killed by a roadside bomb. His fellow soldiers soon discovered that the assassin was no hardened terrorist, but an unemployed father of six who had been paid $200 to plant the explosive. Such situations are not uncommon in Iraq, where high unemployment spawned many "economic insurgents"—often unideological Iraqis in need of cash, who became easy recruits. It was, in part, in response to examples like this that a trio of former military officers created the Marshall Fund, a private-equity fund making only non-oil investments in smallish firms in Iraq. "Without thriving businesses and the jobs they create, Iraq will never be stable," says Dan Rice, who founded the fund along with Wayne Culbreth and Andrew Eberhart. Late last year it closed on its first investment, a tomato-processing plant in the northern region of Harir.

It is profit, not patriotism, that most excites Mr Rice about Iraq. In this, he is not alone. Several multinational companies, from GE to Daimler Benz, have opened up shop in Iraq since 2007, when the country started to become safer as a result of America's military surge. Luring these companies to Iraq are its huge reserves of oil, abundant water supplies, fertile land and strategic location. Then there are Iraq's 30.7m citizens—all potential customers in a new consumer economy who "need and want everything from televisions to washing machines," says Robert Kelley, one of a group of investors that is building a $120m luxury hotel in Baghdad.

That said, the insurgency in Iraq, though diminished, continues to flare. The country's experiment with private enterprise is untested. Under Saddam Hussein's dictatorship, the state controlled everything from interest rates to jobs at the bloated state-owned enterprises (SOEs) that dominated the economy. America began paving the way for a free market in Iraq as soon as Baghdad fell in 2003. The temporary American government abolished tariffs, freed interest rates, cut taxes and stitched together a patchwork of market-friendly bankruptcy and other rules. It also, in effect, shut down Iraq's SOEs by restricting their access to cash, cutting employees' pay by 60% and barring the government from doing business with them.

But a private sector failed to take root. In 2006, with unemployment and underemployment in Iraq well over 50%, according to government estimates, the American administration changed course. It created the Task Force for Business and Stability Operations in Iraq to jump-start the private sector, this time from the bottom up. The hope was that helping to create self-sustaining businesses and, with them, jobs, would give Iraqis—including economic insurgents—a stake in the country's stability. It started by ensuring that American contracts went directly to Iraqi businesses. Since 2006, $2 billion of American contracts have been signed with over 5,000 private Iraqi firms. Next on the agenda was to undo some of the

damage from earlier American policies. The Task Force received $50m in both 2007 and 2008 to restore production in Iraq's 60 SOEs, some of which were running at 10% of capacity or less.

The Task Force's most difficult job, however, was to find companies and investors to put capital and know-how into Iraq's SOEs and private firms. It began arranging visits to Iraq for potential investors from around the world. It provided transport, security, food, offices and accommodation in Baghdad's green zone, even today the only part of Baghdad where visitors from the West are reasonably safe. And it made introductions to government officials and potential Iraqi business partners.

The scheme has already notched up a few successes. Take Iskandiriyah, a manufacturing town. The Task Force arrived in late 2006 to restart the many factories once run by two SOEs there. Today they are producing machine parts, trailers and machinery for the oil industry. Case New Holland, a maker of construction equipment owned by Italy's Fiat, began assembling farm tractors in 2007. In total around 5,000 Iraqis are back at work in Iskandiriyah's two SOEs. The town is considered stable.

The Task Force also helps smaller investors put capital to work in Iraq. Consider the Marshall Fund's $6m investment in the Harir tomato-paste factory, for example. Iraq imports $100m of tomato paste a year, even as its tomato farmers let their excess harvest rot on the vine, because Iraq has no way to turn tomatoes into cans of paste. The Marshall Fund's investment in a tomato-processing plant not only gives factory workers a job, but gives tomato farmers a bigger market and shopkeepers a locally made product. "And because we expect to make a solid return—it's a win, win, win, win," says Mr Rice.

Last year foreign companies invested $910m in private Iraqi joint-ventures. Individuals and investors such as the Marshall Fund put in another $500m for start-ups. Will they reap profits or become a cautionary tale? As with many things in Iraq, it is too early to tell. Most investors still consider the country to be far too risky. The drop in oil prices is already causing a budgetary squeeze for the government, which has had to stop recruiting police and military personnel and reduce weapons purchases. The withdrawal of American troops could leave behind a dangerous vacuum. The Task Force's aim is for it be filled by the private sector, not insurgents.

Face value

Keeper of the flame

Apr 16th 2009
From The Economist print edition

Tony Hsieh of Zappos.com keeps the dotcom spirit alive

Zappos

VISITING the headquarters of Zappos.com in Henderson, near Las Vegas, is like entering a time warp that whisks you back ten years to the heyday of the internet boom. There are the outlandish decorations adorning walls and cubicles, including jungle creepers that hang from the ceiling and a menagerie of toy monkeys and other creatures. There are the boisterous employees, some of whom rattle cowbells, shake pompoms and bellow greetings as visitors pass their desks. And there are the accoutrements of a typical dotcom start-up, including a visiting masseuse and generous helpings of free food for “Zapponians”.

But this is no exercise in nostalgia. Instead, Zappos is the site of an ambitious business experiment led by Tony Hsieh, the firm’s 35-year-old boss. His goal is to create a corporate culture that allows Zappos to prosper by providing world-beating customer service, no matter what business it is involved in. From its origins as an online shoe-retailer founded in 1999, the company has expanded into selling clothes, consumer electronics and other items. Last year it rang up a record $1 billion in sales even as other retailers were struggling. Mr Hsieh muses out loud about the possibility that Zappos might one day enter the hotel or airline industries, perhaps in the offline world.

As a firm backed by venture capital—Sequoia Capital, one of Silicon Valley’s most prestigious investors, has a stake in the company—Zappos has an interest in talking up its future prospects. But Mr Hsieh genuinely seems to admire firms such as Britain’s Virgin Group, which has taken its reputation for being cool, gutsy and disruptive and applied it in many different industries. He reckons Zappos can cultivate a reputation for outstanding customer service to the point where it, too, can become a springboard into several markets. He once described Zappos as “a service company that just happens to sell shoes”.

In the flesh, however, Mr Hsieh is the antithesis of Sir Richard Branson, Virgin’s ebullient founder. Whereas Sir Richard is a charmer and a showman, Mr Hsieh is a reserved, soft-spoken computer-science graduate from Harvard University. But like Sir Richard he has a nose for a deal and a will to succeed. In 1998 Mr Hsieh sold LinkExchange, an online-advertising network that he had co-founded, to Microsoft for $265m. He used the proceeds to set up an investment fund, and one of the start-ups it backed was Zappos, a name inspired by *zapatos*, the Spanish word for shoes. Sensing the firm’s potential, Mr Hsieh moved across to become its chief executive in 2000.

Since then, he and his team have focused their efforts on creating a distinctive culture at the company. Among other things, Zappos has drawn up a set of ten values, including exhortations always to “deliver WOW through service” and to “create fun and a little weirdness”. Zappos publishes an annual “Culture

Book” in which many of the firm’s 1,400 staff explain what its culture means to them. It may all sound tiresome and gimmicky, but the firm bases half of an employee’s performance review on how well each person has lived up to the company’s values.

The firm’s recruitment is also geared to identifying those with a Zappos frame of mind. Potential recruits are asked questions such as “Who is your favourite superhero, and why?” and “On a scale of one to ten, how lucky are you?” And in their first weeks with the company, new employees are offered $2,000 to quit—a significant sum for call-centre trainees who start on $11 per hour. The idea is to weed out anyone with doubts about whether Zappos is really for them. Last year just three people took the cash.

Zappos pays a lot of attention to recruitment and training because it then gives staff plenty of freedom to get on with their jobs. For instance, call-centre employees are urged to do whatever they think is appropriate to rectify a customer’s problems without having to seek a manager’s approval. “You have as much power to help a customer as Tony does himself,” says one employee. Although this *laissez faire* philosophy can cause chaos at times, the results are impressive: three-quarters of Zappos’s sales come from repeat customers and its revenues are still growing this year, albeit more slowly than before.

All this culture-building comes at a cost, however. After several years of just breaking even, Zappos was profitable in 2007 and again last year. But Mr Hsieh sees this “investment” as creating a platform for future growth. It is also designed to differentiate Zappos from other online retailers such as Amazon.com. His efforts have attracted the attention of other firms and Zappos is cashing in on this by launching a subscription-based service for those who want to learn about its unusual ethos and methods.

Tweets to woo

Mr Hsieh’s willingness to share information does not stop there. An avid user of Twitter, a micro-blogging service, he encourages his staff to tweet along with him (their collective postings are on display at twitter.zappos.com). As well as underlining the firm’s commitment to transparency, the tweeting helps bring Zappos to the attention of new customers and further cements its relations with existing ones, who can see the people behind what would otherwise be an impersonal online shop. Twitter can also be a useful outlet for employees: there was plenty of tweeting going on when Zappos had to lay off 124 staff last November because of the recession, for example. Staff say that the company’s open approach to communicating about the lay-offs and its generous severance packages helped to soften the blow.

Mr Hsieh must be hoping that the recession will not have a more lasting effect on shoppers’ habits. Although it has a site, 6pm.com, that sells heavily discounted merchandise, Zappos relies on people paying full price for most of the products it sells, in return for outstanding service. If shoppers become much more price-sensitive, Mr Hsieh’s model might come unstuck. But for now, Zappos is still all about delivering the WOW.

Economist.com FINANCE & ECONOMICS

Home ownership

Shelter, or burden?

Apr 16th 2009
From The Economist print edition

The social benefits of home ownership look more modest than they did and the economic costs much higher

Illustration by Bill Butcher

IN A scene from the film "It's a Wonderful Life", a happy couple is about to enter their new home. Jimmy Stewart, whose firm has sold them the mortgage, reflects that there is "a fundamental urge…for a man to have his own roof, walls and fireplace." He offers them bread, salt and wine so "joy and prosperity may reign for ever".

That embodies the Anglo-Saxon world's attitude to home ownership. Owning your own roof, walls and fireplace, it is thought, is good for householders because it helps them accumulate wealth. It is good for the economy because it encourages people to save. And it is good for society because homeowners invest more in their neighbourhoods, engage more in civic activities and encourage their children to do better at school than do renters. Home ownership, in short, benefits everyone—not just the homeowner—and the more there is of it, the better. Which is why it is usually encouraged by the government. In America, Ireland and Spain, homeowners can deduct mortgage-interest payments from taxable income.

Yet the worldwide crash was bound up in this supposed miracle of social policy. The disaster began with defaults on American subprime mortgages, a financial instrument designed to spread home ownership among the poor. It gathered pace after the failures of Fannie Mae and Freddie Mac, two government-sponsored enterprises that provide cheap home loans. As a result, the home-ownership rate in America has fallen for four years, the first time that has happened in a quarter of a century. In 2008, 2.3m families lost their homes or faced foreclosure—double the average before the crisis—reducing the home-ownership rate from 69% in 2004 to 67.5% at the end of 2008. The number of owner-occupied dwellings also slipped in Britain in 2007-08 for the first time since the 1950s.

Subsidised castles

So attempts to expand home ownership have contributed to the wider economic crisis without succeeding in their own terms. How does that affect the arguments for supporting home ownership? Should it still be deemed a public good?

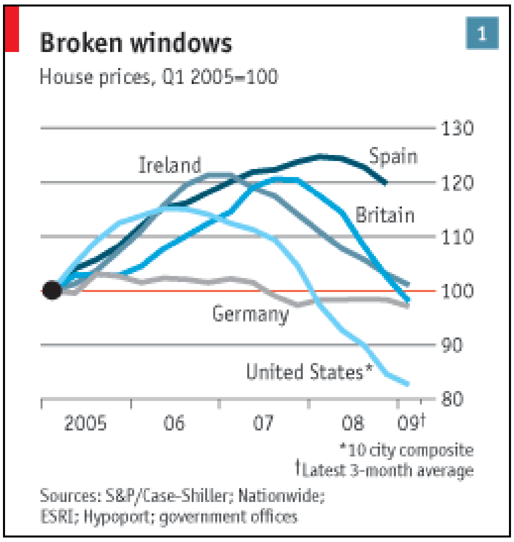
No, say several economists and commentators. "Given the way US policy favours owning over renting," writes Paul Krugman, 2008's Nobel laureate in economics, "you can make a good case that America already has too many homeowners." Edward Glaeser, an economist at Harvard University, talks about

“the madness of encouraging Americans to bet everything on housing”.

So far, policymakers are unmoved. In mid-February Barack Obama proposed a $275 billion plan to support America’s housing market. Outside the Anglo-Saxon world Nicolas Sarkozy, who campaigned for the presidency to turn France into a property-owning democracy, has expanded zero-interest housing loans for the poor.

The main economic argument for home ownership is that, in the words of Thomas Shapiro of Brandeis University, “it is by far the single most important way families accumulate wealth”. This argument now looks as weak as house prices.

In Britain prices have fallen 21% since their peak in October 2007. Prices in America have fallen more slowly but further, down 30% since their peak in mid-2006 (see chart 1). This has reduced the total value of the country’s housing stock from over $22 trillion in 2007 to $19 trillion at the end of 2008. In the past few weeks, housing markets on both sides of the Atlantic have seen signs of life, but there is every chance that prices have further to fall before they finally reach their low.



The collapse in house prices matters most directly to two overlapping groups: those who bought property at the peak of the market and now face “negative equity”; and those (in America) who took out subprime mortgages. Roughly 10m Americans are in negative equity—ie, the cost of their mortgage exceeds the value of their home. In Britain about 3% of households are in negative equity. For homeowners, negative equity makes houses more like a trap than a piggy bank. Those who cannot meet their payments lose their house, their savings and (in America, usually) their credit rating for seven years.

The other area of concentrated distress is subprime mortgages, which increased their share of the American mortgage market from 7% in 2001 to over 20% in 2006. According to the Mortgage Bankers Association, the delinquency rate was 22% in the fourth quarter of 2008, compared with only 5% for prime loans. Many people have concluded that, in Mr Krugman’s words, “home ownership isn’t for everyone.” However, a study by the Centre for Community Capital, part of the University of North Carolina, Chapel Hill, casts some doubt on that conclusion. It compared a group of people who took out subprime loans with a group of borrowers from the Community Advantage Programme (CAP), a government-backed scheme that lends to the sort of people who might have had a subprime mortgage. The default rate for CAP borrowers was only a quarter what it was for subprime mortgage holders, even though the incomes and backgrounds of borrowers were similar. Since the real problem lay partly in the mortgages, rather than the borrowers, this suggests the subprime crisis was a financial-market mess, as well as a housing one.

Does that also imply that home ownership has the economic benefits that its proponents claim? Two pieces of evidence seem to support such a view. The first is that housing has fared better in the crisis than other assets. Share prices are around 50% below their peaks in many countries, so compared with shareowners, homeowners have not done badly. However, home ownership in a downturn has one big disadvantage: most people buy shares outright but homes on margin (ie, they put down a small stake, if anything). If share prices fall by 10%, you lose 10%; if house prices fall by 10%, you may lose your entire savings. The value of American homeowners’ equity in their own houses has slumped from a peak of $12.5 trillion in 2005 to just $8.5 trillion at the end of 2008. This undermines one claim that homeowning is economically beneficial.

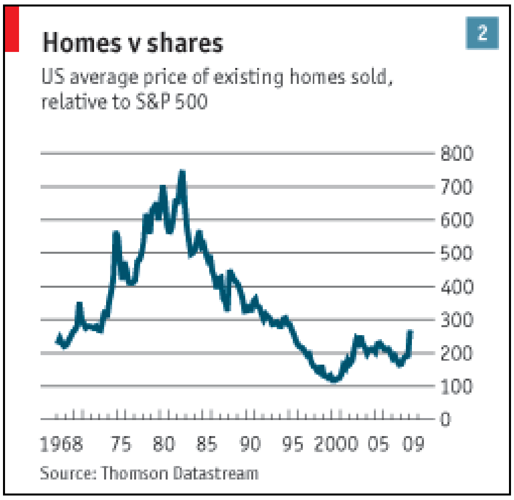
The other piece of evidence for home ownership’s benefits is that the house-price fall has so far spared most existing homeowners from absolute losses. In America, for example, house prices have fallen back only to where they were in 2004. There were roughly 29m house sales in the United States between 2004 and 2007, compared with 115m households, and anyone who bought before then is probably sitting on a nominal profit. However, as Harvard University’s Martin Feldstein points out, if house prices rise, people feel richer and borrow and spend more. If they feel poorer, they may cut back even if the price of their house has not fallen below what they paid for it.

Subsidies to home ownership have thus increased economic volatility. They boosted consumption, as homeowners used their houses as collateral to finance consumption or investment. In America mortgage-

equity withdrawals reached $9 trillion between 1997 and 2006—equal to more than 90% of disposable income in 2006. This gave homeowners more to spend in the good times but less in bad ones. In Britain home-equity withdrawals added the equivalent of 3% of post-tax income to households in the fourth quarter of 2007 but subtracted 3% a year later. So changes to house prices aggravate the economic cycle. Recent research by the IMF finds that a quarter of the 100-odd recessions since 1960 have been associated with house-price busts and that these contractions “are deeper and last longer than other recessions do”.

Subsidies to home ownership have also weakened financial services. They encouraged more people to buy houses (which was the point), but, logically enough, also encouraged lenders to take greater risks with housing. This was fine while house prices were rising, but the fall exposed how vulnerable banks’ balance sheets had become.

Moreover, if public policy aims to create wealth, there are other ways of doing it. People could invest their savings in the stockmarket and rent their homes, for example. Had they done so in the past two years, they would have done worse than homeowners. But for three decades before that, equity prices easily outstripped property prices (see chart 2), so in the long run equities have been a better bet than houses. (Admittedly, this strips out the effects of share dividends and imputed rents, which favour property.) Housing suffers from two further weaknesses as an investment. It sucks up disproportionately large amounts of money, falling foul of the idea that investors should diversify: in America the equity tied up in houses accounts for 45% of the net worth of the average householder. And it is illiquid. If you need to raise money, you cannot sell a room or two, whereas you can always sell a few shares. It is hard to argue houses are the best asset for building wealth.



“Perhaps the most compelling argument for housing as a means of wealth accumulation”, argues Richard Green of the University of Southern California, “is that it gives households a default mechanism for savings.” Because people have to pay off a mortgage, they increase their home equity and save more than they otherwise would. This is indeed a strong argument: social-science research finds that people save more if they do so automatically rather than having to choose to set something aside every month.

Yet there are other ways to create “default savings”, such as companies offering automatic deductions to retirement plans. In any case, some of the financial snake oil peddled at the height of the housing bubble was bad for saving. Subprime, interest-only and other kinds of mortgage instruments allowed people to buy their homes without a down-payment and without building up equity. “Negative amortisation” (neg-am) mortgages even let people pay only part of their interest each month and to add the rest to the principal, increasing their debt, not their savings. Home-equity loans had the same effect.

Where the heart is

The main arguments for home ownership, though, are not primarily economic, but social. Home ownership, argue those who want to expand it, benefits society because it encourages stable, more law-abiding communities; it makes people more likely to vote in local elections and join clubs; and it benefits future generations because, it turns out, the children of homeowners do better at school and have fewer behavioural problems than children of renters.

On the face of it, the evidence for these claims is strong. In America homeowners are less likely to move than renters, so areas with a lot of homeowners are more stable. According to the 2007 American Housing Survey, homeowners stay where they are for about nine years whereas renters move every two.

More stable neighbourhoods are more law-abiding. According to a study of New York City, the home-ownership rate was second only to income as an explanation for different crime rates.

The link between ownership and political participation is stronger still. In America in the early 1990s, 69% of homeowners voted, compared with only 44% of renters. Homeowners are more likely to know who their representatives are; more likely to support local causes or parent-teacher associations and (this being America) more likely to go to church.

Perhaps the most surprising link is between ownership and children. One study in America found that, in 2000, the mathematics scores of the children of homeowners were 9% higher than those of renters' children; reading levels were 7% higher. This had nothing to do with income: the research controlled for that. In another study homeowners' children were 25% more likely to graduate from high school and more than twice as likely to go to university. Their teenage daughters were also less likely to become pregnant.

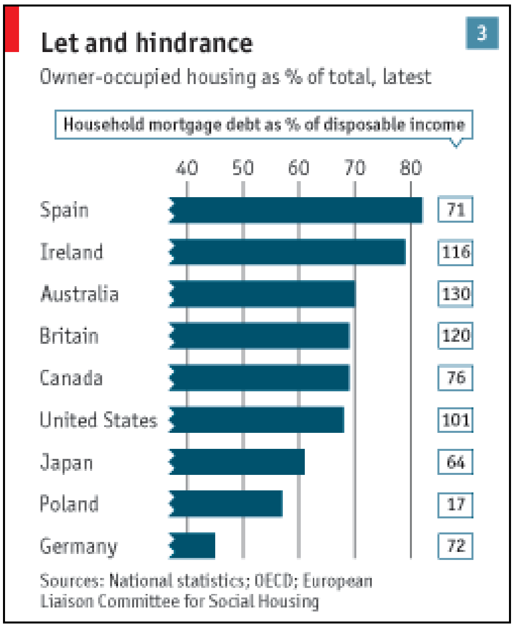
These studies, though, are not the last word. They find a link between children's education and homeowning. But is this because, as some suggest, home ownership requires parents to possess managerial or financial skills that they pass on to their children? Or is it because the people with those skills help their children at school and also buy houses? No one knows.

Nor is it certain that owners always take better care of their neighbourhoods than renters do. Some studies claim that the effect in fact depends on a few public-spirited people willing to set an example. Renters can be public-spirited too. In America areas with lots of renters tend to be transient because the typical rental period is short. In Germany, though, people rent for years. Stable neighbourhoods and widespread home ownership can go together but do not need to. As Bill Rohe of the University of North Carolina, Chapel Hill puts it, "evidence regarding the societal benefits of home ownership is highly conjectural."

Still, on balance, home ownership gives people a stake in the state of their surroundings. Thriving streets increase the value of properties, giving owners incentives to improve them further. Renters get no such benefit; they may even have to pay more if the neighbourhood improves.

Whether stability is such a good thing in a downturn, though, is a different matter. A decade ago Andrew Oswald of Warwick University argued that owning your own home makes you more reluctant to move, so labour markets tend to become more rigid as home ownership increases. He claimed that increases in the level of home ownership (though not necessarily the level itself) are associated with rises in unemployment. Ireland, Greece and Spain all saw large increases in home ownership in the 1980s and 1990s, and had relatively high unemployment. America and Switzerland had stable ownership rates, and escaped the long-term rise in joblessness.

His argument remains controversial. Critics point out that many things other than home ownership might prevent people from moving (children's schools, friends and so on). Anyway, liquid housing markets should make it possible for people to move, if they want to. It is also possible that, even if people were trapped in distressed areas, jobs should move there to take advantage of the willingness of homeowners to accept lower wages.



All that said, Mr Oswald's arguments seem especially powerful at the moment. The recession in America is bearing down most heavily on two groups of states: Florida, California and Nevada, which had the largest house-building booms in the 1990s; and Michigan, New Hampshire, Delaware, West Virginia and Mississippi, which have the highest home-ownership rates. People are not, in fact, moving as frequently as they used to: the share of those moving house in 2007-08—11.9% of the population—was the lowest since records began. So labour markets look less flexible than they were. Negative equity exacerbates immobility because people are reluctant to move if it means selling at a loss. Researchers at the Wharton School reckon that people in negative equity are only half as likely to move as those who are not. In all these ways, high home ownership may prolong and deepen a recession.

The problem remains of how to weigh the economic costs against the social benefits of home ownership. There can be no easy judgment about this but the recent rise and fall of house prices suggests both that the costs are greater and the benefits smaller than once thought.

If owning were such a boon, you would expect neighbourhoods with lots of owners to have done better than those with lots of renters during the boom years. That does not seem to have happened.

What has happened, though, is that above a certain level, foreclosures have done a lot of damage during the bad years. Recent studies of New York and Cleveland find that, if lenders foreclose on 3-4% of

properties in an area, local prices fall even faster and further than average. Rows of For Sale signs almost certainly have the same effect in Britain. In other words, ownership can sometimes be worse for a neighbourhood than renting.

Illustration by Bill Butcher

A shelter—for your money

Lastly, and perversely, the decade of obsession with expanding home ownership may actually have reduced neighbourhood stability. Nicolas Retsinas, the director of the Joint Centre for Housing Studies at Harvard University, suggests that, until the crash in 2008, Americans were coming to see their homes as financial investments rather than as places to live. That is true in other countries. Neg-am mortgages in America and buy-to-rent arrangements in Britain were based on the assumption that houses were primarily investments.

As a result, people seem to have started to buy and sell homes more frequently. Between the mid-1990s and mid-2000s, the number of new houses sold almost doubled in America, from just over 600,000 to over 1.2m in 2006.

Perhaps that made labour markets more mobile, but it was certainly not what policymakers were aiming for when they set out to increase home ownership. Their efforts in the past few years seem to have weakened, though not destroyed, the best arguments for treating home ownership as something to be encouraged: that it increases people's savings and creates better neighbourhoods for everyone. But perhaps you should not be surprised by that. As Adam Smith wrote in "The Wealth of Nations" two centuries ago, "a dwelling-house, as such, contributes nothing to the revenue of its inhabitants."

Banks

The audacity of hope

Apr 16th 2009 | NEW YORK
From The Economist print edition

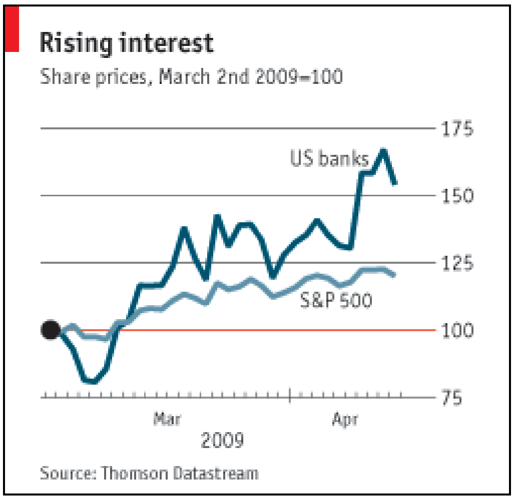
Optimism that banks' fortunes have reached bottom may be premature

Illustration by S. Kambayashi

LLOYD BLANKFEIN may travel by train rather than private jet these days, but the firm he heads has moved back into the fast lane. On April 13th Goldman Sachs kicked off the banks' earnings season in impressive fashion: the $1.8 billion of net profit it posted for the first quarter smashed analysts' forecasts, leaving them wondering, if only for a moment, whether they were back in 2006. At the same time, Goldman cheekily raised more than $5 billion of common equity to help pay back the $10 billion of taxpayer money it was arm-twisted into taking last October.

Goldman is keen to distinguish itself from weaker banks, but optimists see its results as part of a pattern of recovery for the industry. JPMorgan Chase reported stronger-than-expected results on April 16th. Wells Fargo expects to post record quarterly profits, largely thanks to surging mortgage refinancing as interest rates have fallen. Optimism about banks' performance has given their shares a much-needed lift from their March lows (see chart). Hope is growing that, with markets thawing and the yield curve steeper, allowing banks to lend at higher rates than those at which they borrow, many will be able to earn their way out of trouble. The reality may be less cheering.

It is easy to see why Goldman considers it a "duty" to repay the government (it would be the first big bank to do so). With a business model that relies on rewarding top performers handsomely, it is chafing more than most under the executive-pay restrictions that come with the infusion—though it still managed to pay employees slightly more last quarter, as a proportion of total costs, than it did the year before, a "massive middle finger" to congressional critics, as one rival puts it. Goldman worries about other forms of interference, too: politicians have questioned, for instance, whether it should have so much invested in foreign banks, such as China's ICBC.



Goldman hopes to be able to settle its debt to the taxpayer once it gets the result of the stress tests being conducted on America's 19 largest banks, which are due to end at the end of April. A clean bill of health seems all but assured given its high capital ratio, a $164

billion pool of cash and a culture of marking assets to market.

But what is good for one bank may be bad for the system as a whole. Regulators worry that letting one or two strong banks repay risks turning the weak into targets and takes lending capacity out of the system. They also worry about the embarrassing prospect of banks that repay early having to return to the trough if markets deteriorate again, which would create political fireworks. Brad Hintz of Alliance Bernstein expects the government to delay Goldman's repayment until a larger group of banks is able to repay simultaneously.

When that might be is far from clear. Even Goldman is in less stellar shape than its results might suggest. First, they excluded December, a poor month that fell into a convenient gap when Goldman and Morgan Stanley switched to calendar-year reporting on becoming bank-holding firms.

Second, Goldman, like others, benefited from one-off boosts, such as the surge in corporate-bond issuance as seized-up markets began moving again in January, and from managing each other's government-backed debt issues. They are also enjoying freakishly high bid-ask spreads and margins in "flow" businesses, such as fixed income, currencies and commodities (FICC). These have widened by up to 300% thanks to spiking volatility and the retreat of several big rivals, according to a study by Morgan Stanley and Oliver Wyman, a consultancy. Fully 70% of Goldman's first-quarter revenue came from FICC.

These spreads are sure to come down as new actors enter the fray and old ones return, albeit gingerly. Other businesses will struggle to take up the slack any time soon. Goldman's quarter-on-quarter investment-banking revenues were down 20%. Merger-advisory fees are likely to remain depressed for several years.

There is, moreover, still plenty of red ink sloshing around. Citigroup was expected to post its sixth straight quarterly loss on April 17th. It continues to shrink its balance-sheet and to look to sell non-core assets. Morgan Stanley, too, is expected to report a loss on April 22nd, largely thanks to having to mark-to-market its own debt, which has become more expensive. Across the Atlantic UBS, a Swiss bank, warned on April 15th of yet another loss and more job cuts as it tries to stem client defections that, according to its outgoing chairman, have put it in a "precarious" situation.

More blows are coming. Banks worldwide have written down their assets by $1.1 trillion. The final tally is expected to be double that, or more. The pain is only now starting to spread through commercial property and commercial loans. As a result, the first-quarter reprieve will turn out to be a "head fake", says Chris Whalen of Institutional Risk Analytics.

It does not help that many banks have not set aside enough reserves for credit losses—though the blame lies as much with accounting rules as with their own managers. Analysts at Keefe, Bruyette & Woods argue that Wells Fargo holds an array of assets at rose-tinted values and may need another $25 billion in capital, on top of the $25 billion it has already taken from the Treasury. Few banks hold their commercial-property portfolios anywhere close to the 50-60 cents on the dollar valuation that Goldman does.

The longer-term outlook is equally sobering. In 2006 investment banks made an average return on equity of 17%. Just to get back to double digits, they will have to cut costs by well over $100m for every $100 billion of assets they hold, reckon the authors of a recent report from the Boston Consulting Group. Commercial banks can expect their returns to stay in the 10-12% range of the 1940s-80s for the indefinite future, says Richard Ramsden, a Goldman analyst.

Although the overall pie will be less mouth-watering, some will enjoy a bigger slice. Barclays, which snapped up Lehman Brothers' American operations for a song, now boasts a 15% share of the Treasuries market, for instance. But even the survivors remain cautious. David Viniar, Goldman's chief financial officer, this week said market conditions remain "dangerous". One interpretation of the timing of the bank's capital-raising is that it wants to grab what it can in case the second quarter is not as hospitable as the first. No wonder American bank shares are still, on average, trading some 70% below their peak.

The world economy

Buckle down

Apr 16th 2009 | WASHINGTON, DC
From The Economist print edition

Recovery from the recession, when it comes, will be slow and painful

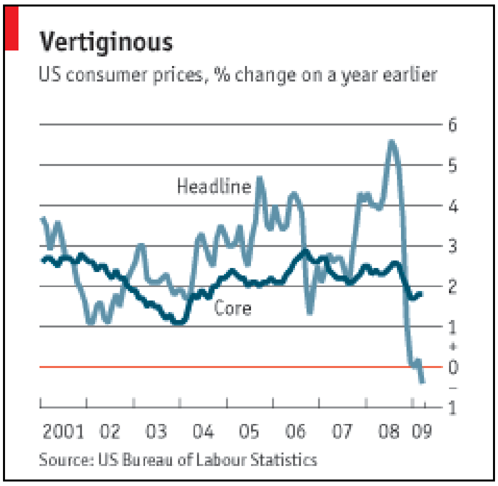
IS THE worst over for the world economy? In recent weeks financial markets have latched on to the "green-shoots" thesis, rising smartly as an array of statistics turned out to be less dire than expected. Policymakers, too, have begun to sound less pessimistic. On April 14th both America's president, Barack Obama, and its central-bank boss, Ben Bernanke, pointed to signs of progress in stabilising the world's biggest economy.

Optimism may be fashionable, but there are plenty of reasons to fear it is premature. The upbeat thesis focuses on firms and their inventories. The global economy slumped at the end of 2008 in part because firms slashed production even faster than demand fell. Now that the stockpiles have shrunk, output should stop slumping. This may be happening. Forward-looking surveys of manufacturers have improved.

The danger, however, is that too much emphasis on the stock cycle misses the underlying characteristics of this downturn. This is mainly a balance-sheet recession precipitated by a financial crisis. And it is a downturn that it is unusually synchronised around the globe.

As an analysis in the IMF's new *World Economic Outlook* makes clear, each of these characteristics points to a deep recession and a weak recovery. The fund's economists examine 122 recessions in rich economies since 1960. They find that in the aftermath of a financial bust, private investment tends to fall even after the downturn reaches its trough, whereas private consumption grows more slowly than in other recoveries. Recoveries from globally synchronised recessions take 50% longer than other recoveries.

Some green shoots are already wilting. America's retail sales fell in March. And dark shadows are looming, particularly the spectre of deflation. America's consumer prices fell by 0.4% in the year to March, the first annual decline since 1955 (see chart). Consumer prices are once again falling in Japan and are barely rising in the euro area.



No one doubts that a prolonged period of deflation would pose grave dangers. Falling prices would raise the real burden of debts. The prospect of lower prices would weaken demand. But optimists still regard that risk as remote. Today's deflation, they argue, is nothing more than the temporary consequence of falling fuel costs. Exclude food and fuel and America's core consumer prices are still rising at 1.8%, within the central bankers' ideal range and well above the lows reached during America's last deflation scare in 2002.

This sanguine attitude has evidence to support it. Not only have central bankers opened the monetary floodgates, but American consumers' expectations for future inflation have barely changed in recent months. Still, there are reasons to fret. Consumer surveys suggest the share of people who expect their incomes to decline is the highest on record. Wholesale-price figures suggest that prices other than energy are falling further down the supply chain. The share of small businesses in America that are cutting workers' wages has doubled. The Fed's latest "Beige Book" report on economic conditions suggested downward pressure on prices and wages. Things could yet get a lot grimmer.

Germany's bail-out

Too little, and late

Apr 16th 2009 | BERLIN
From The Economist print edition

Germany reluctantly faces up to the scale of its banking disaster

IT PUZZLES many in Germany that the country's punctilious parsimony and restrained housing market have not saved it from a banking crisis that seems every bit as bad as those suffered by spendthrifts abroad. Having refused for months to consider a "bad bank" to buy troubled assets, Germany is belatedly wrestling with a plan to do just that. And it is also being forced into its first nationalisation of a bank since the 1930s. The most visible of Germany's ailing banks is Hypo Real Estate (HRE), which the state has already propped up with more than €100 billion ($132 billion) of loans and guarantees. Some of HRE's woes stem from its commercial-property loans, many of which are now souring. But the big danger is the state of its DEPFA subsidiary, a large lender to governments and local governments.

Although this is a relatively safe business, it is also not terribly profitable because governments can generally borrow very cheaply themselves. DEPFA's big error was to try to boost margins by raising a large chunk of the money it loaned out in shorter-term money markets. That business model fell apart when credit markets froze; only huge dollops of government money have kept the bank afloat. With credit still tight, the only way to make a profit on DEPFA's outstanding loans (even if they are all repaid) would be by refinancing them using the government's cheaper debt. Given its problems, nationalisation of HRE seems the only sensible option. On April 9th the government's bail-out fund offered to buy all of it from shareholders.

The boldness the government has shown in dealing with HRE is, however, not at all evident when it comes to the broader problem of bad assets in the banking system. At a meeting on April 21st the government hopes to approve a plan proposed by the finance ministry to establish several small "bad banks". These would use as much as €200 billion provided by the government to buy illiquid assets from their parent banks, freeing up capital so that the banks can lend more easily.

The plans are hobbled by two constraints. The first is that the government hopes to avoid transferring much of the risk of losses to taxpayers without first punishing shareholders. That conflicts with the government's equally pressing desire to avoid nationalising any more banks. These contradictory aims preclude the government from, for instance, wiping out the value of equity in banks by forcing them to write down their assets.

They also preclude the government from assuming most of the risk on banks' balance-sheets by insuring toxic assets, as has happened recently in Britain. The government's hope is that by providing relief on illiquid assets it can allow banks to deal with toxic assets at a more leisurely pace. The worry, of course, is that the focus on illiquid assets instead of toxic ones may do little to restore confidence in banks or allow them to start lending again.

"The mood has definitely turned in favour of a bad bank," says Dorothea Schäfer of DIW, an economic-research institute in Berlin. "But it is unclear that the model now suggested will do anything to improve the situation of banks at all." Having faced up to the problems within its banks, Germany is still not willing to take the decisions needed to solve them.

Brazil's development bank

Central planning

Apr 16th 2009 | SÃO PAULO
From The Economist print edition

Rediscovering the charms of BNDES

WHEN the National Bank for Economic and Social Development (BNDES), Brazil's development bank, was born in the 1950s the country was planning its new capital, Brasília. The city was designed around cars and the bureaucrats who would drive them, from their homes in a district of apartment blocks to one of the ministries in the government district and then, perhaps, to a restaurant in the leisure district. There would be no traffic lights. Everything would be perfectly rational. Faith in BNDES waned along with faith in civil servants. But now that most governments own a bank or two, BNDES is back in fashion.

In truth the bank never lost its importance as a provider of long-term financing to companies in Brazil. Lending to the government, via the bond market, is so profitable and so liquid that it has crowded out the development of a market in long-term corporate debt. BNDES's lack of competition and privileged funding saw its assets grow to 277 billion reais ($120 billion) by the end of 2008. But since credit became scarcer in Brazil last year the bank has added to its role as a financier of projects, and has stepped in to provide shorter-term working capital and trade finance to companies that saw their usual lines suddenly vanish.

BNDES has not always played so helpful a role. In the past its funds were sometimes handed out according to political expediency, to dying companies and in pursuit of a patchily successful industrial policy. The government still has a thing about helping to create big companies that can conquer rivals abroad—BNDES is now helping to finance projects carried out by Brazilian firms elsewhere in South America. But there is less political lending, perhaps because Brazil's companies are in better shape.

The bank also argues that its employees, career civil servants who enjoy jobs for life, are resistant to political pressures as a result. BNDES's administration is slim given the big numbers involved. And it turned a healthy profit of 5.8 billion reais in 2008.

Yet BNDES remains a symbol of a credit market that is not working properly. Those parts of the economy with political clout, like farming and housebuilding, get subsidised credit from state-owned lenders whereas ordinary customers pay through the nose. Useful though it is right now, BNDES and its other state-owned brethren should not still be taking up so much of the road.

Municipal bonds

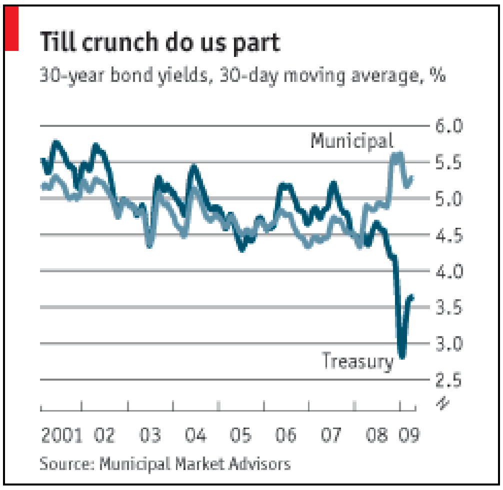
Wakey wakey

Apr 16th 2009 | NEW YORK
From The Economist print edition

As the market fragments, politicians ponder a bail-out

AMERICA'S $2.7 trillion municipal-bond market is usually a sleepy corner of the fixed-income world. Muni bonds, which are issued by local-government borrowers, have usually yielded slightly less than Treasury debt, thanks to a tax exemption on interest income and a reputation for safety. But things changed last year as investors fled risk and there was an implosion of the bond insurers, which used to rent their ratings to roughly half of the market (see chart).

In all, perhaps one-third of the buyers of muni bonds have disappeared. Banks have pulled back. The market has collapsed for auction-rate securities, which were supposed to behave like long-term bonds for borrowers and short-term bonds for lenders. Many of the hedge funds that targeted the market have come a cropper too. That leaves muni bonds even more reliant on retail investors, who hold most of the outstanding muni debt.



A recovery of sorts is under way. The market has rebounded this year, though yields (which rise when prices fall) remain unnaturally lofty. Although the trading volume is sharply down from 2008, new issuance is higher—the week of March 23rd was the strongest since December 2006.

The recently passed economic-stimulus package should help, too. Some $220 billion of it should flow to states and cities, easing fears of municipal defaults and downgrades. The plan also offers new tax incentives to buyers of muni bonds. There are longer-term reasons to like them, too. Tax rates are rising and likely to stay high, making tax-exempt debt more attractive. The population is ageing, and older people tend to favour fixed-income securities, as will many of those whose faith in equities has been shaken by the stockmarket crash.

For many municipalities, however, the future looks unsettling. What was a homogenous lump of a market, with lower-quality issuers lifted to the same level as highly rated ones by bond insurance, is fragmenting. For the first time in decades, investors have had to start doing their own homework on borrowers' underlying credit risk. Most do not have the wit or will to analyse the thousands of smaller issuers, such as hospitals and school districts. These are having to offer much higher rates than big-name borrowers. "It is the smaller and lower-rated issuers that are most impacted by the loss of bond insurance," says Jerry Rizzieri of Barclays Capital.

Where there is pain, a rescue cannot be far behind. The House of Representatives' financial-services committee is working on a bill that would provide federal guarantees for new municipal issuance and liquidity support for the $500 billion of variable-rate notes, the muni market's equivalent of commercial paper. A variable-rate backstop could ensure that hundreds of issuers are not shut out of the market, or forced to issue longer-term debt at great cost when bank credit lines expire.

But the case for broader government help is unclear. Matt Fabian of Municipal Market Advisors, a consultancy, worries that blanket guarantees would prop up duff borrowers just as lenders become more discriminating. Issuers that got used to easy money "need to understand it's no longer 2006." A grand intervention at this stage is likely to do more harm than good.

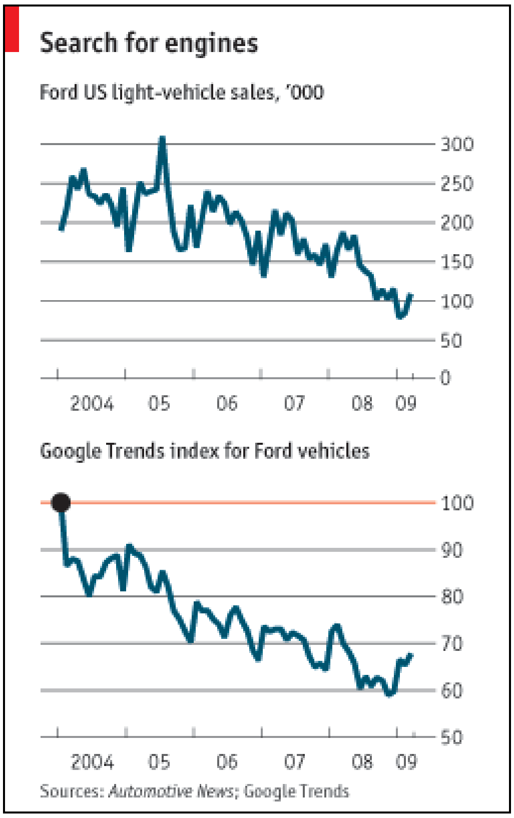
Economic indicators

Googling the future

Apr 16th 2009
From The Economist print edition

Internet search data may be useful for forecasters

CLAIMS of clairvoyance, particularly when they come from economists, deserve a sceptical reception. Hal Varian, a professor of economics at the University of California, Berkeley who also happens to be Google's chief economist, has no such pretensions, but he does believe that data on internet searches can help predict certain kinds of economic statistics before they become available.



In a new paper written with Hyunyoung Choi, a colleague at Google, he argues that fluctuations in the frequency with which people search for certain words or phrases online can improve the accuracy of the econometric models used to predict, for example, retail-sales figures or house sales. Actual numbers for such things are usually available only with a lag. But Google's search data are updated every day, so they can in theory capture shifts in consumer behaviour before official numbers are released.

These data are available through a site called Google Trends, which allows anyone who cares to do so to download an index of the aggregate volume of searches for particular terms or categories. Mr Varian and Mr Choi show that the addition of these search trends to econometric models improves the accuracy of their estimates.

For example, using data on searches for trucks and SUVs to predict the monthly sales of motor vehicles reduces the average error by up to 18% compared with the predictions from a model that did not incorporate the search data. The volume of searches for Hong Kong carried out in countries like America, Britain, Australia and India also seems to predict eventual tourist arrivals to the territory from these countries rather well.

How widely could this idea be applied? For some things, like retail sales, the categories into which Google classifies its search-trend data correspond closely to what people may want to predict, such as the sales of a particular brand of car (see chart). For others, like sales of houses, things are less clear. It appears that searches for estate agents work better than those for home financing. But anything that makes the crystal ball less cloudy is welcome.

China's economy

Bamboo shoots of recovery

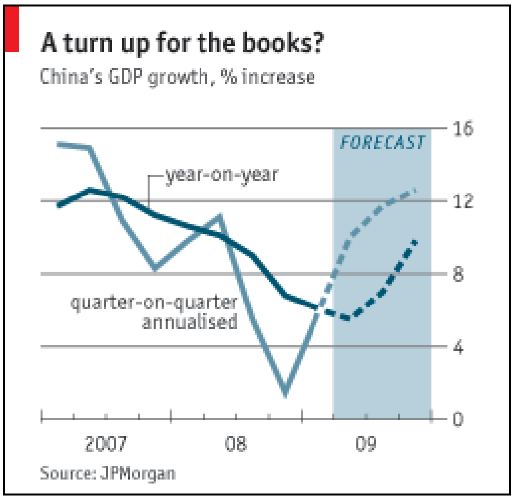
Apr 16th 2009 | HONG KONG
From The Economist print edition

Signs that a giant fiscal stimulus is starting to work

THE Chinese consider eight to be a lucky number because it sounds like the word meaning “prosperity”. And luck, combined with a massive fiscal stimulus, may yet help the government to achieve its growth target of 8% in 2009. Earlier this year, most economists thought such growth was impossible at a time of deep global recession, but some are now nudging up their forecasts.

At first sight, the GDP figures published on April 16th were disappointing. China’s growth rate fell to 6.1% in the year to the first quarter, less than half its pace in mid-2007. On closer inspection, however, the economy is starting to perk up. Comparing the first quarter with the previous three months, GDP rose at an estimated annualised rate of around 6%, after nearly stalling in the fourth quarter (see chart). By March the economy was gaining more speed, with the year-on-year increase in industrial production rising to 8.3% from an average of 3.8% in the previous two months. Retail sales were 16% higher in real terms than a year ago, and fixed investment has soared by 30%, signalling that the government’s infrastructure-led stimulus is starting to work.

Exports, on the other hand, tumbled by 17% in the year to March and global demand is widely expected to remain weak this year. This is the main reason why some economists expect GDP growth of “only” 5% for 2009 as a whole. But the gloomier forecasts tend both to overstate the importance of exports and to understate the size of the government’s stimulus.



Contrary to conventional wisdom, China’s sharp economic slowdown was not triggered by a collapse in exports to America. Its growth began to slow in 2007, well before exports stumbled, driven by a collapse in the property market and construction. This was the result of tight credit policies aimed at preventing the economy from overheating. The global slump dealt a second blow late last year, but China is less dependent on exports than is commonly believed. Exports account for nearly 40% of GDP but they use a lot of imported components, and only make up about 18% of domestic value-added. Less than 10% of jobs are in the export sector.

If a collapse in domestic demand led China’s economy down, it can also help lead it up again. Not only is China’s fiscal stimulus one of the biggest in the world this year, but the government’s ability to “ask” state-owned firms to spend and state banks to lend means that the government’s measures are being implemented more rapidly than elsewhere. To take one example, railway investment has tripled over the past year.

Only about 30% of the government’s 4 trillion yuan ($585 billion) infrastructure package is being funded by the government. Most of the rest will be financed by bank lending, which had already soared by 30% in the 12 months to March, twice its pace last summer. JPMorgan thinks that this credit and investment boom could lift GDP growth to an annualised pace of over 10% in each of the next three quarters.

Jonathan Anderson, an economist at UBS, argues that the property market could be as important as the fiscal stimulus in determining China’s fate. After falling sharply last year, housing sales rose by 36% in value in the year to March. Housing starts are still down, but if sales continue to strengthen, construction could pick up in the second half of 2009. That would also help to support consumption: about half of China’s job losses among migrant workers have been in the building industry.

If construction does recover and infrastructure spending continues to rise, then even if exports remain

weak, China could see growth of close to 8% this year—impressive stuff when rich economies are expected to contract by 4-5%. There are growing concerns about the quality of that growth, however. The World Bank estimates that government-influenced spending will account for three-quarters of China's GDP growth this year. The clear risk is that politically directed lending creates more overcapacity, poor rates of return and future bad loans for banks.

These are valid concerns. But Andy Rothman, an economist at CLSA, a brokerage, reckons that state-owned firms mainly plan to increase their spending on upgrading existing production facilities, rather than expanding capacity. Also, about half of the increase in investment is on public infrastructure. This will inevitably include some white elephants but, in a poor country, the return on infrastructure investment is generally high. There is no need to build "bridges to nowhere" when two-fifths of villages lack a paved road to the nearest market town.

What about the risks to banks? The last time they were forced to support the government's stimulus policy, during Asia's financial crisis in 1998, Chinese banks were left with large non-performing loans. Bad loans will rise again this time, but Tao Wang, also at UBS, argues that banks are in a stronger position than in 1998. China is one of the few countries in the world where bank credit has fallen relative to GDP over the past five years. Banks have an average loan-to-deposit ratio of only 67%, low by international standards, and less than 5% of banks' loans are non-performing, down from 40% in 1998.

Reuters

Bridge urgently needed

The biggest task for China is to find a new engine for future growth. It cannot rely on exports, nor can the investment stimulus be sustained for long. Without stronger consumer spending, China's growth will be much slower than in recent years. Reforms to improve health care and the social safety net will take many years to encourage people to save less.

Andy Xie, an independent economist based in Shanghai, suggests that the quickest way to boost consumption would be for the government to distribute the shares that it holds in state-owned enterprises to households, and to force those firms to pay larger dividends. But the authorities in Beijing are unlikely to take his advice. How else could they lean on big firms to support the economy in times like these?

Economics focus

The curse of politics

Apr 16th 2009
From The Economist print edition

Financial crises can drag on because efficient remedies are politically unpalatable

Illustration by Jac Depczyk

AS THEIR banking crisis approaches Japanese proportions, Americans can take comfort from the fact that their political culture is more capable of finding a solution. Or can they? Today's anti-banker backlash bears a striking resemblance to the voter outrage that stymied efforts to fix Japan's banking system in the 1990s. Indeed, an enduring lesson of financial crises is how political constraints interfere with economically efficient solutions.

For example, America's Treasury and the Federal Reserve began examining options to use public money to buy up illiquid mortgage assets and to inject capital into financial institutions shortly after rescuing Bear Stearns, a failing investment bank, in March 2008. But it was another six months before they acted on those plans. "There was no way we could go to Congress without the American people understanding we faced a crisis," says Henry Paulson, the treasury secretary at the time.

Sure enough, not until the failure of Lehman Brothers sparked a global panic in September did Mr Paulson and Ben Bernanke, the Fed chairman, ask Congress to authorise an outlay of $700 billion to support the system. Some say Mr Paulson should have tried harder to acquire the funds before the Lehman crisis. Perhaps, but it is doubtful he would have succeeded. "Even at the height of the crisis, [that] proved almost too hard to do," he notes.

Phillip Swagel, an economist who will join Georgetown University this autumn, writes in a review* of his experience as an aide to Mr Paulson from December 2006 to January 2009 that market participants and academic economists often proposed solutions that glossed over real-world political and legal obstacles. Some academics argued bank creditors should be forced to swap their debt for equity, for example. But Mr Swagel notes that is not legally possible without a change in the bankruptcy code, a tortuous political process. Similarly, to reduce housing foreclosures the Treasury and Congress focused on reducing interest rates for struggling homeowners, even though this would be less effective than subsidising write-downs of mortgage principal. But politicians and voters would have seen that as an unacceptable bail-out of some undeserving homeowners.

Economists have long studied how institutional constraints interfere with efficient economic choices, such as when special interests erect barriers to entry in product markets. Such constraints have received relatively little attention in the burgeoning literature on financial crises. Yet a closer examination shows

that many of the same political obstacles crop up from one crisis to the next. Japan's Ministry of Finance first sought private-sector solutions to its banking crisis so as not to arouse voter anger by using taxpayers' money. When those solutions failed, the government proposed in 1995 spending a mere ¥685 billion ($7 billion) to take over the problem loans of seven *jusen*, or mortgage-finance companies. The backlash was intense. Opposition parties called for the finance minister's resignation and staged a sit-in at parliament. In one poll, 87% of voters disapproved. The measure eventually passed, but the experience was so searing that it discouraged the government from tackling the banks' much bigger bad loans until 1997.

In spite of these difficulties, some governments do negotiate the political shoals. South Korea is often praised for the speed and forcefulness with which it took over failing banks and bought up bad loans following its financial crisis in 1997-98. But the South Korean government was able to deflect public anger by arguing that it was being forced to take these steps by the IMF, which to this day most Koreans blame for the crisis.

Sweden took over two banks and issued a blanket guarantee of bank liabilities in the early 1990s even though the governing coalition did not have a majority in parliament. Bo Lundgren, the finance minister at the time, says Swedish voters would have rejected the bail-out had it been put to a referendum. But the government first ensured it had the support of the opposition party (from whom it had inherited the crisis) and then obtained authority from parliament for unlimited funds, so it did not have to return for more money later.

This time it's not different

A blank cheque would greatly suit Barack Obama, who gave warning on April 14th that American banks may "require substantial additional resources". Mr Obama has pencilled in another $750 billion of potential stabilisation funds in his 2010 budget but unlocking extra money will be extremely tricky. Despite commanding majorities in Congress and high personal-approval ratings, he must overcome solid opposition from voters jaded by revelations of bankers' excess.

That may well mean violating certain economic principles. Economists generally prefer transparent to hidden subsidies. But Mr Swagel says that the Treasury came to realise that underpricing insurance for bank assets roused less political opposition than overpaying for assets precisely because the insurance is less transparent. The Treasury is also relying on the Fed to finance illiquid assets by printing money because that requires no congressional approval (even if it compromises the Fed's independence).

The other temptation is to couple assistance for bankers with a hefty dose of punishment to sate the public's hunger for justice. Sweden sued the boards of the two banks it nationalised. Several executives agreed to repay their "golden-handshake" severances to avoid prosecution. Mr Obama promised that if banks need more aid, "we will hold accountable those responsible." The risk, of course, is that pandering to voters' anger only inflames them further, and makes it even harder to put money into the banking system as need arises.

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* "The Financial Crisis: An Inside View" by Phillip Swagel, presented at the Brookings Papers on Economic Activity conference, April 2009

Marjorie Deane internship

Apr 16th 2009
From The Economist print edition

Applications are invited for the 2009 Marjorie Deane internship. This award, financed by the Marjorie Deane Foundation, is designed to provide work experience for a promising journalist or would-be journalist, who will spend three months of the summer at *The Economist*, writing about economics and finance. Applicants may also be considered, if they wish, for an internship of similar duration at *CFO Europe*, a sister publication of *The Economist*. Applicants should send a letter introducing themselves, with an original article of no more than 500 words that they think would be suitable for publication in this section of *The Economist*. Applications should be sent by e-mail to deaneintern@economist.com or posted to the Business Affairs Editor (Deane internship), The Economist, 25 St James's Street, London, SW1A 1HG. They must reach us by April 24th.

Autism and extraordinary ability

Genius locus

Apr 16th 2009
From The Economist print edition

There is strong evidence for a link between genius and autism. In the first of three articles about the brain this week, we ask how that link works, and whether "neurotypicals" can benefit from the knowledge

Ronald Grant Archive

THAT genius is unusual goes without saying. But is it so unusual that it requires the brains of those that possess it to be unusual in others ways, too? A link between artistic genius on the one hand and schizophrenia and manic-depression on the other, is widely debated. However another link, between savant syndrome and autism, is well established. It is, for example, the subject of films such as "Rain Man", illustrated above.

A study published this week by Patricia Howlin of King's College, London, reinforces this point. It suggests that as many as 30% of autistic people have some sort of savant-like capability in areas such as calculation or music. Moreover, it is widely acknowledged that some of the symptoms associated with autism, including poor communication skills and an obsession with detail, are also exhibited by many creative types, particularly in the fields of science, engineering, music, drawing and painting. Indeed, there is now a cottage industry in re-interpreting the lives of geniuses in the context of suggestions that they might belong, or have belonged, on the "autistic spectrum", as the range of syndromes that include autistic symptoms is now dubbed.

So what is the link? And can an understanding of it be used to release flashes of genius in those whose brains are, in the delightfully condescending term used by researchers in the area, "neurotypical"? Those were the questions addressed by papers (one of them Dr Howlin's) published this week in the *Philosophical Transactions of the Royal Society*. The society, Britain's premier scientific club and the oldest scientific body in the world, produces such transactions from time to time, to allow investigators in particular fields to chew over the state of the art. The latest edition is the outcome of a conference held jointly with the British Academy (a similar, though younger, organisation for the humanities and social sciences) last September.

A spectrum of belief

A standard diagnosis of autism requires three things to be present in an individual. Two of these three, impairments in social interaction and in communication with other people, are the results of autists lacking empathy or, in technical jargon, a "theory of mind". In other words they cannot, as even fairly young

neurotypicals can, put themselves in the position of another being and ask themselves what that other is thinking. The third criterion, however, is that a person has what are known as restrictive and repetitive behaviours and interests, or RRBI, in the jargon.

Until recently, the feeling among many researchers was that the first two features were crucial to someone becoming a savant. The idea was that mental resources which would have been used for interaction and communication could be redeployed to develop expertise in some arbitrary task. Now, though, that consensus is shifting. Several of the volume's authors argue that it is the third feature, RRBI, that permits people to become savants.

Francesca Happé of King's College, London, is one of them. As she observes, obsessional interests and repetitive behaviours would allow someone to practice, albeit inadvertently, whichever skill they were obsessed by. Malcolm Gladwell, in a book called "Outliers" which collated research done on outstanding people, suggested that anyone could become an expert in anything by practising for 10,000 hours. It would not be hard for an autistic individual to clock up that level of practice for the sort of skills, such as mathematical puzzles, that many neurotypicals would rapidly give up on.

Many, but not all. Dr Happé has drawn on a study of almost 13,000 individual twins to show that childhood talent in fields such as music and art is often associated with RRBIs, even in those who are not diagnosed as classically autistic. She speculates that the abilities of savants in areas that neurotypicals tend to find pointless or boring may result from an ability to see differences where a neurotypical would see only similarities. As she puts it, "the child with autism who would happily spend hours spinning coins, or watching drops of water fall from his fingers, might be considered a connoisseur, seeing minute differences between events that others regard as pure repetition."

Simon Baron-Cohen, a doyen of the field who works at Cambridge University, draws similar conclusions. He suggests the secret of becoming a savant is "hyper-systematising and hyper-attention to detail". But he adds sensory hypersensitivity to the list. His team have shown one example of this using what is known as the Freiburg visual acuity and contrast test, which asks people to identify the gap in a letter "c" presented in four different orientations. Those on the autistic spectrum do significantly better at this than do neurotypicals. That might help explain Dr Happé's observations about coins and raindrops.

Insight, too, is given by autists themselves. Temple Grandin is a professor of animal science at Colorado State University. She also writes about her experience of being autistic. As she describes in the volume, one of the differences she perceives between her experience and that of most neurotypicals is that she thinks in images. She says her mind is like an internet search engine that searches for photographs. To form concepts, she sorts these pictures into categories. She does not, however, claim that all autistic people think like this. To the contrary, she describes two other sorts: pattern thinkers who excel at maths and music, and verbal specialists who are good at talking and writing, but lack visual skills. The latter might not qualify as autistic under a traditional diagnosis, but slip into the broader autistic spectrum.

The question of how the autistic brain differs physically from that of neurotypicals was addressed by Manuel Casanova of the University of Louisville, in Kentucky. Dr Casanova has spent many years dissecting both. His conclusion is that the main difference is in the structure of the small columns of nerve cells that are packed together to form the cerebral cortex. The cortical columns of those on the autistic spectrum are narrower than those of neurotypicals, and their cells are organised differently.

The upshot of these differences is that the columns in an autistic brain seem to be more connected than normal with their close neighbours, and less connected with their distant ones. Though it is an interpretative stretch, that pattern of connection might reduce a person's ability to generalise (since disparate data are less easily integrated) and increase his ability to concentrate (by drawing together similar inputs).

Rain and sunshine

Given such anatomical differences, then, what hope is there for the neurotypical who would like to be a savant? Some, possibly. There are examples of people suddenly developing extraordinary skills in painting and music in adult life as a result of brain damage caused by accidents or strokes. That, perhaps, is too high a price to pay. But Allan Snyder of the University of Sydney has been able to induce what looks like a temporary version of this phenomenon using magnetism.

Dr Snyder argues that savant skills are latent in everyone, but that access to them is inhibited in non-

savants by other neurological processes. He is able to remove this inhibition using a technique called repetitive transcranial magnetic stimulation.

Applying a magnetic field to part of the brain disrupts the electrical activity of the nerve cells for a few seconds. Applying such a field repeatedly can have effects that last for an hour or so. The technique has been approved for the treatment of depression, and is being tested against several other conditions, including Parkinson's disease and migraines. Dr Snyder, however, has found that stimulating an area called the left anterior temporal lobe improves people's ability to draw things like animals and faces from memory. It helps them, too, with other tasks savants do famously well—proofreading, for example, and estimating the number of objects in a large group, such as a pile of match sticks. It also reduces "false" memories (savants tend to remember things literally, rather than constructing a mnemonic narrative and remembering that).

There are, however, examples of people who seem very neurotypical indeed achieving savant-like skills through sheer diligence. Probably the most famous is that of London taxi drivers, who must master the Knowledge—ie, the location of 25,000 streets, and the quickest ways between them—to qualify for a licence.

The expert here is Eleanor Maguire of University College, London, who famously showed a few years ago that the shape of the hippocampus, a part of the brain involved in long-term learning, changes in London cabbies. Dr Maguire and her team have now turned their attention to how cabbies learn the Knowledge.

The prodigious geographical knowledge of the average cabbie is, indeed, savant-like. But Dr Maguire recently found that it comes at a cost. Cabbies, on average, are worse than random control subjects and—horror—also worse than bus drivers, at memory tests such as word-pairing. Surprisingly, that is also true of their general spatial memory. Nothing comes for nothing, it seems, and genius has its price.

Savant syndrome, then, is a case where the politically correct euphemism "differently abled" has real meaning. The conclusion that should be drawn, perhaps, is not that neurotypicals should attempt to ape savants, but that savants—even those who are not geniuses—should be welcomed for what they are, and found a more honoured place in society.

Conscious and unconscious thought

Incognito

Apr 16th 2009
From The Economist print edition

Evidence mounts that brains decide before their owners know about it

EVERYONE has had the experience. You are confronted by a complex problem, with a not-so-obvious solution. You pore over it, engrossed, but still the answer will not come. Fearing you will be stuck for ever, you take a walk. Then suddenly, from nowhere, there it is. Eureka!

But did it really come from nowhere? A piece of research about to be published in the *Journal of Cognitive Neuroscience*, by Joydeep Bhattacharya at Goldsmiths' College in London and Bhavin Sheth at the University of Houston, in Texas, suggests that although people are not consciously aware of it, their brains have to be in a certain state for an insight to take place. Moreover, that state can be detected electrically several seconds in advance of the "aha!" moment itself.

The question of where insights come from has become a hot topic in neuroscience, despite the fact that they are not easy to induce experimentally in a laboratory. Some researchers have used getting the punch line of a riddle as an example of an insightful outcome. Critics complain, however, that this is less an insight than an "outsight". Other experiments have used word tasks. In these, a person might be given three seemingly unrelated words, such as "skirts", "black" and "put", and asked to come up with a fourth that can link to each of the other three. (In this case, "out".) But those tasks may say more about lexical ability than true insight.

Dr Bhattacharya and Dr Sheth have taken a third approach. They have selected some brain-teasing but practical problems in the hope that these would get closer to mimicking real insight. To qualify, a puzzle had to be simple, not too widely known and without a methodical solution. The researchers then asked 18 young adults to try to solve these problems while their brainwaves were monitored using an electroencephalograph (EEG).

A typical brain-teaser went like this. There are three light switches on the ground-floor wall of a three-storey house. Two of the switches do nothing, but one of them controls a bulb on the second floor. When you begin, the bulb is off. You can only make one visit to the second floor. How do you work out which switch is the one that controls the light?

That light-bulb moment

This problem, or one equivalent to it, was presented on a computer screen to a volunteer when that volunteer pressed a button. The electrical activity of the volunteer's brain (his brainwave pattern, in common parlance) was recorded by the EEG from the button's press. Each volunteer was given 30 seconds to read the puzzle and another 60 to 90 seconds to solve it. If he had not done so in the time allotted, a hint appeared. In the case of the light-switch puzzle, the suggestion was that you turn one switch on for a while, then turn it off.

Some people worked it out; others did not. The significant point, though, was that the EEG predicted who would fall where. Those volunteers who went on to have an insight (in this case that on their one and only visit to the second floor they could use not just the light but the heat produced by a bulb as evidence of an active switch) had had different brainwave activity from those who never got it. In the right frontal cortex, a part of the brain associated with shifting mental states, there was an increase in high-frequency gamma waves (those with 47-48 cycles a second). Moreover, the difference was noticeable up to eight seconds before the volunteer realised he had found the solution. Dr Sheth thinks this may be capturing the "transformational thought" (the light-bulb moment, as it were) in action, before the brain's "owner" is consciously aware of it.

There is a precedent for such observations of unconscious thought in action. In the 1980s Benjamin Libet of the University of California, San Francisco, showed that simple decisions, such as when to move a

finger, are made about three-tenths of a second before the brain's owner is aware of them, and subsequent work has found that the roots of such decisions can be seen up to ten seconds before they become conscious. But this is the first occasion that such a long lead time has been shown for more complex thought processes.

This finding, combined with Libet's, poses fascinating questions about how the brain really works. Conscious thought, it seems, does not solve problems. Instead, unconscious processing happens in the background and only delivers the answer to consciousness once it has been arrived at. Food for further thought, indeed.

Language and cognition

Twice blessed

Apr 16th 2009
From The Economist print edition

Bilingual babies are precocious decision-makers

WHETHER to teach young children a second language is disputed among teachers, researchers and pushy parents. On the one hand, acquiring a new tongue is said to be far easier when young. On the other, teachers complain that children whose parents speak a language at home that is different from the one used in the classroom sometimes struggle in their lessons and are slower to reach linguistic milestones. Would 15-month-old Tarquin, they wonder, not be better off going to music classes?

A study just published in the *Proceedings of the National Academy of Sciences* may help resolve this question by getting to the nub of what is going on in a bilingual child's brain, how a second language affects the way he thinks, and thus in what circumstances being bilingual may be helpful. Agnes Kovacs and Jacques Mehler at the International School for Advanced Studies in Trieste say that some aspects of the cognitive development of infants raised in a bilingual household must be undergoing acceleration in order to manage which of the two languages they are dealing with.

Alamy

Questo è il modo di farlo

The aspect of cognition in question is part of what is termed the brain's "executive function". This allows people to organise, plan, prioritise activity, shift their attention from one thing to another and suppress habitual responses. Bilingualism is common in Trieste which, though Italian, is almost surrounded by Slovenia. So Dr Kovacs and Dr Mehler looked at 40 "preverbal" seven-month-olds, half raised in monolingual and half in bilingual households, and compared their performances in a task that needs control of executive function.

First, the babies were trained to expect the appearance of a puppet on a screen after they had heard a set of meaningless words invented by the researchers. Then the words, and the location of the puppet, were changed. When this was done, the monoglot babies had difficulty overcoming their learnt response, even when the researchers gave them further clues that a switch had taken place. The bilingual babies, however, found it far easier to switch their attention—counteracting the previously learnt, but no longer useful response.

Monitoring languages and keeping them separate is part of the brain's executive function, so these findings suggest that even before a child can speak, a bilingual environment may speed up that function's development. Before rushing your offspring into Tongan for Toddlers, though, there are a few caveats. For one thing, these precocious cognitive benefits have been demonstrated so far only in "crib" bilinguals—those living in households where two languages are spoken routinely. The researchers speculate that it might be the fact of having to learn two languages in the same setting that requires greater use of executive function. So whether those benefits accrue to children who learn one language at home, and one at school, remains unclear.

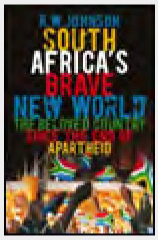
South Africa

Going wrong

Apr 16th 2009
From The Economist print edition

Three books map, with varying degrees of anger and disappointment, the path chosen by the recent leaders of post-apartheid South Africa

South Africa's Brave New World: The Beloved Country Since the End of Apartheid
By R.W. Johnson



Allen Lane; 702 pages; £25

Buy it at
Amazon.com
Amazon.co.uk

After the Party: Corruption, the ANC and South Africa's Uncertain Future
By Andrew Feinstein

Verso; 301 pages; $26.95 and £14.99

Buy it at
Amazon.com
Amazon.co.uk

Bring Me My Machine Gun: The Battle for the Soul of South Africa, from Mandela to Zuma
By Alec Russell

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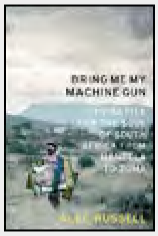

PublicAffairs; 336 pages; $26.95. Published in Britain as "After Mandela: The Battle for the Soul of South Africa"; Hutchinson; £18.99

Buy it at
Amazon.com
Amazon.co.uk

FOR those who hoped that the rainbow nation emerging miraculously from the ashes of apartheid would bed down into a pluralistic and genuinely multiracial democracy, this trio of books provides a painful dose of disappointing scepticism. All three deem South Africa's second post-apartheid president, Thabo Mbeki, a colossal failure. All, with differing degrees of certainty, consider Jacob Zuma, the probable next president, to be unworthy of the post. All of them, 15 years after Nelson Mandela led the country into its new era, bemoan the course it has taken. Yet they vary strikingly in tone.

The angriest and most ambitious is the weighty tome of R.W. Johnson, a South Africa-born former adherent of the radical left who taught politics at Oxford for some 20 years before returning to his country to head the Helen Suzman Foundation, a liberal think-tank. His book is a relentless and pulverising polemic against the ruling African National Congress (ANC) and virtually all of its leading lights. Even Mr Mandela is scolded for "making poor use of his immense authority" and for "presiding over many blunders and lost opportunities".

The ANC, in Mr Johnson's view, has become a nest of racists, thieves and hypocrites, who have done almost no good at all since they won power in 1994. Mr Mbeki is accused of "reracialising" South African politics, and the author supports this charge with a stack of evidence. According to Mr Johnson, the corruption which now permeates the party was most patent in the activities of its first minister of defence, the late Joe Modise, who is described as a big-time gangster. But most of the ANC's lesser figures are accused of a host of venal sins too. A rapid conflation of party and state has led to the withering of independent institutions, a charge also levied by the authors of the other two books reviewed here.

Mr Johnson hurls particular vitriol at the policy of Black Economic Empowerment (BEE). As he describes it, this has merely enabled an ANC-connected elite to enrich itself fabulously in the name of affirmative action officially meant to tip more of the economy into black hands. He lists in remorseless detail a web of ties between ANC leaders and their families and the new rich and powerful. In Mr Johnson's eyes, the ANC's crude efforts to replace whites with its black supporters across the board has harmed the health service, served to "debase the entire educational system" and generally helped the black masses not a whit. "It is difficult", he writes, "to find a minister—apart from Trevor Manuel at finance—who did not preside over a steep fall in standards." Like the other two authors, Mr Johnson blames Mr Mbeki's denial of links between HIV and AIDS for causing several hundred thousand unnecessary deaths. Similarly, Mr Mbeki is condemned for failing to squeeze Zimbabwe's Robert Mugabe out of power.

Andrew Feinstein, a former ANC member of parliament who headed a public accounts committee that required him to investigate a bunch of big arms deals, focuses mainly on corruption, both grand and petty. With wrenching anger and painstaking care, his book describes how graft has infected the new establishment. Many of the most respected figures of the liberation struggle placed loyalty to party above their responsibility to be honest with the people who had elected them.

Mr Mbeki is again the chief villain, trampling on Parliament while manipulating and browbeating the party in his quest for personal power. His time in office was "a tragic failure defined by AIDS denial, catastrophe in Zimbabwe, widening inequality, persistent violent crime and growing corruption." The ANC

has “plummeted into a moral abyss…corruption is in the process of destroying [it].” The should-be-independent institutions of democracy “diminished” by Mr Mbeki include “the prosecutorial authority, the office of the auditor-general, investigative bodies, the intelligence agencies, the medicines control council, the medical research council, the human rights commission, the public broadcaster” and various others. Mr Feinstein’s account is sadder than Mr Johnson’s, because it starts from a position of hope and idealism that is painfully whittled away.

It is a relief to view South Africa’s past two decades through Alec Russell’s gentler, insightful, sometimes humorous, sometimes bleak, but always kaleidoscopic prism. He robustly addresses the same doleful issues of governance as the other two. It would have been better, he writes, if both Mr Mbeki and Mr Zuma had stepped aside to let a new man take the presidency next month.

But his portrait of South Africa, alive with delicious vignettes across a range of humanity, is more nuanced—and more readable—than those of his two counterparts. Perhaps, as an outsider (who now edits world news for the *Financial Times* in London) he could more easily step back, after two stints as a correspondent in Johannesburg, and still enjoy the beloved country in all its contradictions.

Mr Feinstein, a *persona* too honest to be *grata* with the ANC, now lives in London too. As for Mr Johnson, it will be a test of Mr Zuma’s expected presidency whether he remains free to hurl his angry brickbats at all and sundry.

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By R.W. Johnson.
Allen Lane; 702 pages; £25

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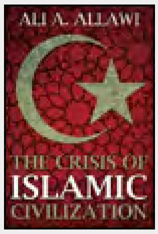
Economist.com BOOKS & ARTS

Islam

The choice facing Muslims

Apr 16th 2009
From The Economist print edition

The Crisis of Islamic Civilisation
By Ali A. Allawi



Yale University Press; 304 pages; $27.50 and £18.99

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FOR those (and they are many) who are convinced by the thesis that the West and its values are under remorseless siege from a menacing and resurgent Islam, Ali Allawi's antithesis may seem a little surprising, even absurd. But the author is a distinguished Iraqi who has twice served in post-Saddam governments in Baghdad and whose last, much-acclaimed book was a searing indictment of American (and Iraqi) failings. Though the two books tackle very different themes, what they have in common is their author's intimate knowledge of both Islam and the West, and his unflinching honesty.

Mr Allawi calls his new book an "attempt to understand the factors behind the decay of the spirit of Islam". He locates this decay not in the personal piety of the world's Muslims—which remains vibrant—but in the collective failure of Muslims, over the past 200 years, to come up with an adequate and effective response to Western modernity. The problem is not that Islam is incapable of finding its own path to modernity. Mr Allawi wholly rejects the popular notion that Islam is inherently incompatible with tolerance, democracy, women's rights—in short, all that the West holds dear.

The difficulty, he says, is that the predominant Muslim response to the Western challenge has been narrowly political instead of being rooted in the inherited ethos of Islamic civilisation. Seen in this light, the Islamist movements which have received so much attention since the Islamic revival in the 1970s are shallow and passionate. For all their pretence of offering an "Islamic alternative", they represent, or so he argues, nothing more than Western modernity in Islamic garb.

Mr Allawi calmly and methodically deconstructs an Islamic revival which has failed to live up to its promise. Islamist movements and secular governments anxious to pay lip-service to Islam have, between them, failed spectacularly to anchor themselves in genuinely Islamic principles: principles which, for Mr Allawi, are as much about inner spirituality as outward religiosity. The results are everywhere to be seen. Autocratic governments abuse human rights, whether in Islamic Iran, Saudi Arabia and Sudan or in secular Egypt and Syria. Economies are corrupt and maladministered, and their supposed ethical principles, such as Islamic banking, are a sham. There has been a profound loss of cultural creativity, apparent, for example, in the decay of the Islamic city and its time-honoured traditions of craftsmanship, piety and community.

Mr Allawi buttresses his case with some striking statistics: "The creative output of the twenty or thirty million Muslims of the Abbasid era [750-1258] dwarfs the output of the nearly one-and-a-half billion Muslims of the modern era." Per head, the income of the wealthiest Muslim country (the United Arab Emirates) is 200 times that of the poorest (Somalia).

Is there a solution? Mr Allawi, himself a Shia Muslim, believes the mystical (or Sufi) tradition must be an integral part of the revival of Islamic civilisation. But here too—although Sufism retains a strong grassroots following in several parts of the Muslim world—he finds himself at odds with both the modernist and puritanical (Wahhabi) strands of Islam, which disdain the individualistic heterodoxy of "folk Islam".

The West has not helped. Mr Allawi castigates the hysterical Islamophobia which came in the wake of the attacks of September 2001, as well as the hubristic attempts to "reform" Islam in the name of defeating terrorism. He insists that the challenge of recapturing the "spirit of Islam" is a task for Muslims, not outsiders. The stark choice for the Muslim world is between the revival of its civilisation, difficult as that is to achieve, and its secularisation—"the dissolution of Islam into modernity". Mr Allawi is not sanguine.

The Crisis of Islamic Civilisation.
By Ali A. Allawi.
Yale University Press; 304 pages; $27.50 and £18.99

Economist.com BOOKS & ARTS

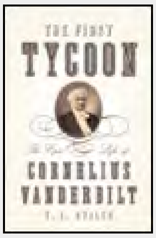
Cornelius Vanderbilt

Bare-knuckled capitalism

Apr 16th 2009
From The Economist print edition

ESPECIALLY now, the world has misgivings about unbridled American capitalism. But let us not forget that the foundations of the greatest economy on earth were laid timber by timber, railway sleeper by railway sleeper, by capitalists who fought for business often with bare fists and only the vaguest notions of fair play.

The First Tycoon: The Epic Life of Cornelius Vanderbilt
By T.J. Stiles



Knopf; 736 pages; $37.50

Buy it at
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Cornelius Vanderbilt was the toughest of the lot. With his hard nose protruding like a ship's prow, and his hands leathered from a youth spent piloting his cut-price ferry into Manhattan, he took to business as if it were war. He even masterminded a war—against an American *filibustero* in Nicaragua—to save a shipping business he had built to serve the Gold Rush.

Later his campaign moved to the railways, just beginning to bind America together after the civil war. Now it was the weapons of finance that he used, cornering shares and launching blistering bear raids to beat off equally merciless rivals. Vanderbilt's consolidation of the railways into the mighty New York Central & Hudson River Railroad in 1869 built him one of the greatest fortunes America has ever seen. When he died eight years later, his $100m estate was worth more than a tenth of every dollar in circulation at the time.

But it is the description of Vanderbilt's legacy to American capitalism, rather than his wealth, that makes T.J. Stiles's long but superbly written and researched book worthy of its subject. Mr Stiles made his name with a biography of the Confederate train robber, Jesse James. With Vanderbilt, a New York robber baron on the other side of the tracks, he tackles the economic divisions in America as well as the social ones.

The Manhattan docks were a place of "stiff top hats, swallowtail coats and trousers that had replaced the eighteenth century's powdered hair and knee breeches." Trade up the Hudson river was controlled by an aristocratic elite with pretensions to secure a steamboat monopoly. But decades after Adam Smith had identified the market's "invisible hand", a class of scrappier merchants was emerging in America. They were Jeffersonian in their disdain for patricians, Jacksonian in their belief in individualistic, competitive enterprise. By now Vanderbilt, a steamboat captain defying jail, slashing fares and pushing his boilers ever harder to travel more speedily, was fast becoming the "commodore" of this anti-monopolistic vanguard.

He beat the aristocrats in the Supreme Court with his role in *Gibbons v Ogden*, a celebrated case in 1824. His fast, cheap boats and trains supported a textile boom in New England. During the Gold Rush he steered his steamships single-handedly through Nicaraguan river rapids to find a way to get his passengers more quickly and cheaply to the Pacific Ocean.

If this makes for good economic and social history, what brings life to the personal narrative is his relationship with the scheming gang of steamboat and railway owners who are at times Vanderbilt's partners, at times his enemies. When they trick him, as they often try, he is relentless—and ruthless—in getting revenge. His ties with them also mark the biggest contradiction in Vanderbilt's life. Though scourges of entrenched monopolies, he and they strike extraordinary deals to limit competition when they can.

As Vanderbilt's battle moves on to the railways, he develops a new form of combat which Mr Stiles argues is his main legacy: the giant but invisible corporation, artfully created on Wall Street to be so big that it was able to crush its competitors. By creating the largest business enterprise America had ever seen, the "railroad king" became the antithesis of the scrappy individual he was at the start.

Everyone who travelled between New York and Boston used his boats or trains. His power, through the

Central, as his company was known, became so great that the government—decades before it had a strong civil service—could not constrain him. Mark Twain lampooned him, possibly unfairly, for mowing down pedestrians in his fine horse-drawn carriage. (“No matter, I’ll pay for them.”) In an open letter in 1869 Twain told him, “You are the idol of only a crawling swarm of small souls.”

Vanderbilt’s legacy undoubtedly came at a cost. As the railway corporations boomed, so did credit, and it moved swiftly down the tracks to the nation as a whole. A Wall Street crash in 1873 wrecked the economy for five years—though Vanderbilt, of course, prospered.

But back down those same railway lines into the cities came people, about 7m a year by 1870. Many were the sort of aspiring professionals who would want to work for Vanderbilt’s corporation. They would be the founding members of America’s emerging middle class.

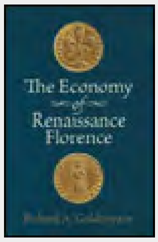
The First Tycoon: The Epic Life of Cornelius Vanderbilt.
By T.J. Stiles.
Knopf; 736 pages; $37.50

Renaissance Florence

Cradle of capitalism

Apr 16th 2009
From The Economist print edition

The Economy of Renaissance Florence
By Richard A. Goldthwaite



Johns Hopkins University Press; 672 pages; $55 and £28.50

Buy it at
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RICHARD GOLDTHWAITE has served a long apprenticeship. As a dedicated student of the economy of Florence between the 13th and 16th centuries, he has published studies of the city's buildings and banks, its private wealth and the demand for its art. Now he has stood back and produced a magisterial history which brings all the strands of the story together and becomes, among its other virtues, a persuasive account of early capitalism.

Florence became one of medieval and Renaissance Europe's great industrial cities. Its principal resource was the river, the fast-flowing Arno, which provided power and water for industry and access to the sea for imports and exports. But an even greater source of strength was the enterprise and ingenuity of its merchants, who set about transforming a healthy local wool industry into an international business by importing large quantities of better-quality wool, from England and later Spain, to manufacture the fine, light worsted woollen cloth that was in demand all over Europe.

By the 1340s the economy was sufficiently robust to survive the bankruptcy of its leading bankers, the Bardi and the Peruzzi—"the Rothschilds of the Middle Ages"—and the Black Death, which reduced the population of the city by two-thirds. (The bankruptcies were not, apparently, all due to the default of the English king, Edward III, who has usually been blamed.)

Mr Goldthwaite, professor emeritus of history at Johns Hopkins University in Baltimore, Maryland, is an uncompromising researcher. For example, he has a revisionist view of the Medici, stubbornly refusing to eulogise Cosimo or Lorenzo de' Medici, the conventional heroes of popular histories of Renaissance Florence. "One could write the history of Florentine banking in the 15th century without so much as mentioning the Medici," he writes. He does so, partly to record that the decline and eventual collapse of the Medici bank had little impact on the banking system as a whole.

Banking developed in Florence because of the ingenious development of bills of exchange, first as a way of paying debts without having to transport cash, then as a means of evading the church's usury laws, and finally as a means of extending credit. "When the merchant extended his traffic in the exchange market to enter the credit market, he became a banker"—and a capitalist.

Bankers became immensely rich, although they had only a minor role in channelling direct investments into manufacturing businesses. Manufacturing industry was financed by partnerships; the textile trade put out work to individual weavers and did not require capital to establish factories, though a silk workshop next to Sandro Botticelli's studio made so much noise that the painter was forced to flee.

The Florentine businessmen were unfinished capitalists. Mr Goldthwaite subtly suggests that they lacked a strong competitive capitalist instinct: "Their behaviour at home and abroad often reveals an underlying spirit of corporatism."

They certainly knew how to spend. In Renaissance Florence greed was good. The rich lavished their wealth on luxury goods for their palazzos, and on shameless dressing up. This encouraged an outburst of great work by artisan painters, sculptors, architects and decorators. The art market in Florence at that time was not as big as in Antwerp and Bruges, and there were only a third as many painters as in Bruges. Florentine artists were kept busy by local commissions. There was, however, a trickledown effect on taste which created a market for inferior art from the Low Countries. A 16th-century art historian, Giorgio Vasari, remarked that "there was not a shoemaker's house in the city that did not have a Flemish painting."

Early in the 17th century the banking industry was no longer a leader in Europe; that role had been acquired by Antwerp. And although specialist textiles retained an international market, the wool industry was in terminal decline.

Banking and wool had made Florence envied and admired throughout Renaissance Europe, but their shrinking did not mean that the city slipped out of Europe's consciousness. Mr Goldthwaite's conclusion is a happy one: "Wealth was recycled and invested in human capital and transformed into the patrimony of urban architecture, artwork and a tradition of craftsmanship unequalled in any other city." It is an awesome legacy.

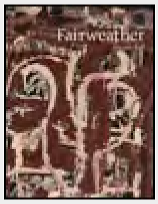
The Economy of Renaissance Florence.
By Richard A. Goldthwaite.
Johns Hopkins University Press; 672 pages; $55 and £28.50

Ian Fairweather

A reclusive Australian painter

Apr 16th 2009
From The Economist print edition

Fairweather
By Murray Bail



Murdoch Books; 280 pages; £50

Buy it at Amazon.co.uk

A STRANGE shy man with a cultured voice but almost penniless stepped ashore in Melbourne in 1934 and unrolled some drawings tied up in a singlet. "I was absolutely staggered," remembered the first person to view them. "I was dumbfounded at the beauty of those things."

Ian Fairweather was an artist of exceptional force and originality who, until his death in 1974, produced paintings that merged the diverse influences of cubism, aboriginal art and Chinese calligraphy. An art critic, Robert Hughes, believed that "the emotional range and sheer breathtaking beauty" of Fairweather's finest pieces, such as "Epiphany", surpassed all other Australian paintings.

In this handsome book of biography and colour reproductions (first published in 1981 but now greatly expanded and altered) Murray Bail goes a step further: "There is nothing like these paintings in Australian art—or anywhere else." Yet who was this pathologically reclusive artist?

Mr Bail, a prize-winning novelist who wrote "Eucalyptus", is a critic parsimonious with his enthusiasms, but he has devoted many years to beating Fairweather out of the bush that was the artist's preferred habitat. A self-appointed vagrant who was "much travelled but unworldly", Fairweather was born in Scotland, the youngest of nine children of a surgeon-general in the Indian army, and spent his first ten years in the care of Scottish aunts. After an adolescence in Jersey, he joined the army but was captured in France at the start of the first world war, passing some of his happiest years as a prisoner-of-war. He then studied at the Slade school of art in London, a favourite pupil of Henry Tonks, an artist who found him "profoundly melancholy". From then on, "he avoided the art world like a plague".

Few artists, Mr Bail demonstrates, can have enjoyed such poverty in such inhospitable surroundings. Fairweather worked as a farmhand in Canada, a road-inspector in Shanghai and a bush-cutter in Australia, living variously in a concrete-mixer and an abandoned patrol boat (Darwin), a converted cinema (Brisbane), an empty goat dairy (Cairns) and a tent (Bribie Island).

Patrick White, an Australian writer who once visited him, drew on him for the painter in his novel "The Vivisector", but in his dogged modesty and solitariness Fairweather more closely resembled White's desert explorer in "Voss". Whenever he saw anyone approach, he rushed into the bush and hid. "Hell for Fairweather was other people," writes Mr Bail.

A perfectionist who painted at night by the light of a hurricane lamp, Fairweather destroyed much of his art. The 500 or so paintings and drawings that remain are intensely felt, unsettling and resonate with "a searching necessity". The act of painting was the thing: "It gives me the same kind of satisfaction that religion, I imagine, gives to some people." He didn't much care what happened to his work afterwards, to the extent of sometimes disowning it, or even not recognising it.

Fairweather.
By Murray Bail.
Murdoch Books; 280 pages; £50

Maurice Jarre

Apr 16th 2009
From The Economist print edition

Maurice Jarre, composer for film, died on March 28th, aged 84

AFP The Picture Desk

THE cinema, as he remembered it, was off Trafalgar Square. It was small, stuffy and dark. And there, over 40 hours in early 1962, Maurice Jarre watched the first rough cut of David Lean's "Lawrence of Arabia". The showings started at 9am on a Monday and did not finish till the Friday. And he was mesmerised. Peter O'Toole, the blue-eyed, white-robed Lawrence, rode his camel along a beach at dawn. He crested the dunes and gazed out over a landscape of shimmering oranges and greys. Cavalcades of Arabs, keffiyehs flying, raced across the sand. It was astoundingly beautiful. And it was completely silent.

Mr Jarre's commission was to write the music for it. It was extraordinary that he had been asked. Sam Spiegel, the producer, had heard only his ten-minute score for a French film called "Sundays and Cybele", written for bass, counter-bass, flute and table-harp. Now he was supposed to produce, in six weeks, two hours of music for a 100-piece orchestra. Back in his room in Half Moon Street he tried to read all he could about T.E. Lawrence, including the huge "Seven Pillars of Wisdom", as well as searching for that little swatch of notes that might turn into a theme. Search, search, search, search, as Stravinsky said. "Sam Spiegel told me, you have the job of Superman!" Mr Jarre joyously recalled.

His task was the more incredible because, until he was 16, he hadn't known "a C from a D". His parents had expected and urged him to be an engineer. But his father also brought home one day a recording of Liszt's Second Hungarian Rhapsody, one hearing of which eventually persuaded the young Maurice to abandon his Sorbonne engineering course, enrol at the Paris Conservatoire, and devote his life to music. Now he was in heady company. Spiegel recruited him for "Lawrence of Arabia" only after Walton and Arnold had proved unavailable. And he became the conductor of the score only because Sir Adrian Boult threw up his baton in horror at the technicalities of trying to mesh the music with the film.

Being a conductor, Mr Jarre liked to say, was 50% talent and 50% diplomacy. Being a film composer was much the same. The director would have one concept of the film, but he might have another. Even Mr Lean, who was soon a fast friend and would work with no other composer, could drive him mad with his perfectionism. Mr Jarre had many attempts at the melody that became "Lara's Theme" in "Doctor Zhivago" (1965), which was covered by performers the world over and won him his second Oscar of three. On a first hearing, Mr Lean thought it was too sad. On a second, it was too fast. Then he wanted

nothing Russian in it. Mr Jarre took all his advice, but later sneaked back the balalaikas. He did the same with “Ryan’s Daughter” (1970), in which Mr Lean wanted nothing Irish: not only sliding in the rhythm of a suppressed gig in the title theme, but scoring for eight harps.

Other great directors were harder to work with. Hitchcock was polite, but uninterested in what music might add to his direction. Clint Eastwood “didn’t much understand music”, didn’t seem to trust it, and preferred sound effects. John Frankenheimer (“Grand Prix”, 1966) wanted him to catch the distinctive sound of a Ferrari engine. On “Fatal Attraction” (1987), “a very very scary film”, as he found it, Adrian Lyne instructed him just to write “something discreet” whenever a scene was horrible. Woodwind seemed to do it. The highest plaudit Mr Jarre could give a director was that he was “entrusting”, and left him to it. But Peter Weir on “Mosquito Coast” was so entrusting that he got him to write the music from the script, and began to shoot the film to the sound of it. It was a disaster. Mr Jarre learned then, as he might have intuited before, that he could make the music work only by watching the film. He had to see before he could hear.

Strings, drums and gamelans

He was a percussionist, working first in theatre, and it showed. From the banging drums that opened “Lawrence of Arabia”, to the snaffles and snares of “The Tin Drum”, to the full band, four grand pianos and pipe organ in “Mad Max Beyond Thunderdome”, he revelled in reverberations just as much as the sweeping strings he was famous for. Ethnic instruments, from digeridoos to gamelans, gave counterpoint to his tendency to swim in luscious sound. He composed his first electronic score for “The Year of Living Dangerously” (1982), relishing the sharp new timbre of a music few directors wanted. His style ranged wide, from Palm Court dances in “A Passage to India” to jaunty Sousa-style marches in “The Man Who Would Be King”, but it could also be spare. A solo violin carried the theme in “The Fixer”; in “Jacob’s Ladder” a piano played with subtle dissonances, very like Satie.

Few directors, Lean apart, really understood how powerful music could be in film. Mr Jarre did his best to tell them. Music, he emphasised, could reveal emotions no words or pictures could. The drama and effort of the barn-building in “Witness”, underlined with the mounting rhythms of a *passacaglia*; the first stirrings of sexual feeling in “A Passage to India”, pointed by sitars; and Lawrence bowing ecstatically to his own flowing shadow in the desert, a moment now never recalled without Mr Jarre’s soundtrack welling behind him.

Overview

Apr 16th 2009
From The Economist print edition

American consumer prices decreased by 0.1% in March on a seasonally adjusted basis, after having risen by 0.4% in February. Prices were 0.4% lower in March than a year earlier, the first time consumer prices have fallen year-on-year since 1955.

There was cautious optimism from America's **Federal Reserve**, which said that five of its 12 constituent district banks reported a moderation in the pace of economic decline, with several indicators in some sectors stabilising, albeit at a low level.

China's GDP grew by 6.1% in the year to the first quarter, its slowest pace since records began in 1992. Nevertheless, growth in industrial production, retail sales and investment led the government to claim that its stimulus plan is working.

Wholesale prices in **Germany** were 8% lower in March than a year earlier, having fallen by 0.9% since February.

Retail sales in **South Africa** were 4.5% lower in real terms in February than a year earlier.

Singapore's economy contracted by a record 11.5% in the year to the first quarter. The government predicts GDP will shrink by as much as 9% this year, which would make it Asia's worst-performing economy.

Poland's annual inflation rate rose to a four-month high of 3.6% in March. A weak zloty has raised fuel prices, but the currency strengthened on news that Poland has applied to the IMF for a flexible credit line of $20.5 billion.

Output, prices and jobs

Apr 16th 2009
From The Economist print edition

Output, prices and jobs

% change on year ago

	Gross domestic product				Industrial production	Consumer prices			Unemployment
	latest	qtr*	2009†	2010†	latest	latest	year ago	2009†	rate‡, %
United States	−0.8 Q4	−6.3	−2.7	+1.4	−12.8 Mar	−0.4 Mar	+4.0	−0.8	8.5 Mar
Japan	−4.3 Q4	−12.1	−6.5	+0.4	−38.4 Feb	−0.1 Feb	+1.0	−1.0	4.4 Feb
China	+6.1 Q1	na	+6.0	+7.0	+8.3 Mar	−1.6 Feb	+8.7	−0.8	9.0 2008
Britain	−2.0 Q4	−5.9	−3.5	+0.3	−12.5 Feb	+3.2 Feb§	+2.5	+1.2	6.5 Jan††
Canada	−0.7 Q4	−3.4	−1.9	+1.6	−7.8 Jan	+1.4 Feb	+1.8	+0.6	7.7 Feb
Euro area	−1.5 Q4	−6.2	−3.4	+0.2	−17.3 Jan	+0.6 Mar	+3.6	+0.4	8.5 Feb
Austria	+0.5 Q4	−0.8	−2.0	+0.3	−6.5 Jan	+0.8 Mar	+3.5	+0.6	4.5 Feb
Belgium	−0.8 Q4	−6.5	−2.7	+0.3	−17.9 Jan	+0.6 Mar	+4.4	+0.7	11.2 Feb‡‡
France	−1.1 Q4	−4.4	−2.7	+0.3	−15.5 Feb	+0.3 Mar	+3.2	+0.3	8.6 Feb
Germany	−1.7 Q4	−8.2	−4.3	+0.3	−20.3 Feb	+0.5 Mar	+3.1	+0.3	8.1 Mar
Greece	+2.4 Q4	+1.2	−3.4	−0.4	−4.6 Feb	+1.3 Mar	+4.4	+0.9	9.4 Jan
Italy	−2.9 Q4	−7.5	−3.7	+0.1	−20.7 Feb	+1.2 Mar	+3.3	+0.8	6.9 Q4
Netherlands	−0.6 Q4	−3.8	−2.7	+0.5	−12.7 Feb†††	+2.0 Mar	+2.2	+0.9	4.1 Mar††
Spain	−0.7 Q4	−3.8	−3.1	−0.5	−23.9 Feb	−0.1 Mar	+4.5	+0.3	15.5 Feb
Czech Republic	+0.7 Q4	−3.7	−3.0	+1.2	−23.4 Feb	+2.3 Mar	+7.1	+1.8	7.7 Mar
Denmark	−3.7 Q4	−7.3	−3.1	+0.5	−11.3 Feb†††	+1.8 Mar	+3.1	+1.1	2.5 Feb
Hungary	+2.0 Q4	−3.9	−3.0	+0.4	−25.4 Feb	+2.9 Mar	+6.7	+2.9	9.1 Feb††
Norway	+0.8 Q4	+5.6	−1.2	+0.5	−5.1 Feb	+2.5 Mar	+3.2	+1.7	3.1 Jan***
Poland	+2.9 Q4	na	+0.7	+2.2	−14.3 Feb	+3.6 Mar	+4.1	+3.0	10.9 Feb‡‡
Russia	+1.2 Q4	na	−3.0	+2.0	−13.2 Feb	+14.0 Mar	+13.3	+13.5	8.5 Feb‡‡
Sweden	−4.9 Q4	−9.3	−3.6	+0.7	−22.9 Feb	+0.2 Mar	+3.4	−0.1	8.0 Feb‡‡
Switzerland	−0.1 Q4	−1.2	−2.3	+0.1	−6.0 Q4	−0.4 Mar	+2.6	−0.2	3.3 Mar
Turkey	−6.2 Q4	na	−2.0	+1.5	−23.7 Feb	+7.9 Mar	+9.2	+7.8	12.3 Q4‡‡
Australia	+0.3 Q4	−2.1	−0.8	+1.6	+3.8 Q3	+3.7 Q4	+3.0	+2.1	5.7 Mar
Hong Kong	−2.5 Q4	−7.8	−5.9	−0.3	−10.3 Q4	+0.8 Feb	+6.3	+0.9	5.0 Feb††
India	+5.3 Q4	na	+5.0	+6.4	−1.2 Feb	+9.6 Feb	+5.5	+5.9	6.8 2008
Indonesia	+5.2 Q4	na	−1.3	+0.6	−6.1 Jan	+7.9 Mar	+6.3	+3.9	8.4 Aug
Malaysia	+0.1 Q4	na	−3.0	+1.1	−14.6 Feb†††	+3.7 Feb	+2.7	−0.7	3.0 Q4
Pakistan	+5.8 2008**	na	+1.2	+3.2	−8.9 Jan	+19.1 Mar	+14.1	+10.1	5.6 2007
Singapore	−11.5 Q1	−19.7	−7.5	+1.9	−22.4 Feb	+1.9 Feb	+6.5	+0.9	2.6 Q4
South Korea	−3.4 Q4	−20.8	−5.9	+0.3	−10.3 Feb	+3.9 Mar	+3.9	+0.1	3.7 Mar
Taiwan	−8.4 Q4	na	−6.5	+0.1	−27.1 Feb	−0.1 Mar	+3.9	−1.0	5.6 Feb
Thailand	−4.3 Q4	−22.2	−4.4	+1.4	−19.8 Feb	−0.2 Mar	+5.3	−1.2	2.4 Jan
Argentina	+4.9 Q4	−1.2	−2.8	+1.5	−14.0 Feb	+6.3 Mar	+8.8	+6.4	7.3 Q4††
Brazil	+1.3 Q4	−13.6	−1.5	+2.7	−17.0 Feb	+5.6 Mar	+4.7	+4.4	8.5 Feb‡‡
Chile	+0.2 Q4	−8.3	−0.5	+2.4	−11.5 Feb	+5.0 Mar	+8.5	+3.0	8.5 Feb†††‡
Colombia	−0.7 Q4	−4.1	−1.0	+1.5	−10.7 Jan	+6.1 Mar	+5.9	+5.0	12.5 Feb††
Mexico	−1.6 Q4	−10.3	−4.4	+1.2	−11.1 Jan	+6.0 Mar	+4.3	+5.0	5.3 Feb‡‡
Venezuela	+3.2 Q4	na	−5.0	−5.4	−25.4 Dec	+28.6 Mar	+29.1	+30.1	6.3 Q4‡‡
Egypt	+5.9 Q3	na	+3.8	+3.9	+7.3 Q3	+12.1 Mar	+14.4	+8.1	8.8 Q4‡‡
Israel	+1.2 Q4	−0.5	+0.4	+2.6	−4.1 Jan	+3.6 Mar	+3.7	+1.8	6.3 Q4
Saudi Arabia	+4.2 2008	na	+0.4	+3.3	na	+6.0 Mar	+8.3	+4.3	na
South Africa	+1.0 Q4	−1.8	−0.8	+3.1	+8.6 Feb	+8.6 Feb	+9.8	+6.0	21.9 Dec‡‡

*% change on previous quarter, annual rate. †*The Economist* poll or Economist Intelligence Unit estimate/forecast. ‡National definitions.- §RPI inflation rate nil in Feb. **Year ending June. ††Latest three months. ‡‡Not seasonally adjusted. ***Centred 3-month average †††New series

The Economist commodity-price index

Apr 16th 2009
From The Economist print edition

The Economist commodity-price index

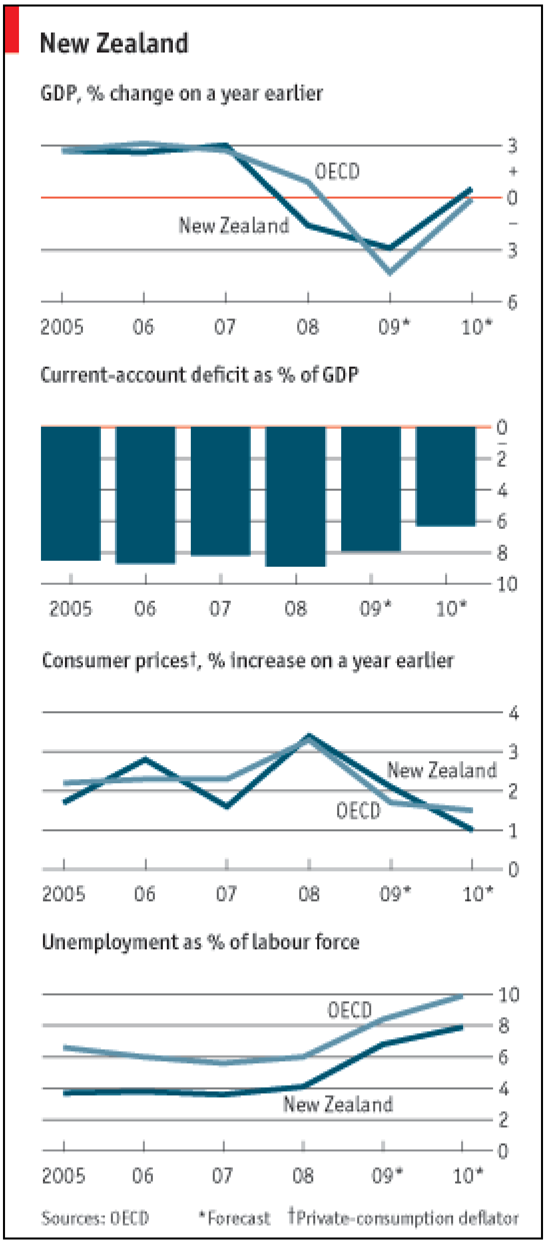
2000=100

	Apr 7th	Apr 14th*	% change on one month	% change on one year
Dollar index				
All items	167.2	170.0	+7.8	-35.3
Food	190.3	191.5	+3.9	-26.6
Industrials				
All	137.2	142.2	+15.4	-46.3
Nfa†	119.7	122.1	+14.0	-37.0
Metals	146.8	153.2	+16.0	-49.5
Sterling index				
All items	171.3	173.1	+1.4	-14.7
Euro index				
All items	115.3	118.6	+5.5	-22.8
Gold				
$ per oz	870.35	891.20	-2.8	-3.9
West Texas Intermediate				
$ per barrel	51.03	49.51	+1.1	-56.5

*Provisional †Non-food agriculturals.

New Zealand

Apr 16th 2009
From The Economist print edition



Trade, exchange rates, budget balances and interest rates

Apr 16th 2009
From The Economist print edition

Trade, exchange rates, budget balances and interest rates

	Trade balance* latest 12 months, $bn	Current-account balance latest 12 months, $bn	Current-account balance % of GDP 2009†	Currency units, per $ Apr 15th	Currency units, per $ year ago	Budget balance % of GDP 2009†	Interest rates, % 3-month latest	Interest rates, % 10-year gov't bonds, latest
United States	-761.0 Feb	-673.3 Q4	-3.3	-	-	-13.1	0.30	2.76
Japan	+21.0 Feb	+131.8 Feb	+1.5	99.4	101	-5.7	0.52	1.42
China	+316.9 Mar	+400.7 Q2	+6.2	6.83	6.99	-3.7	1.21	3.54
Britain	-163.1 Feb	-44.6 Q4	-1.7	0.67	0.51	-11.3	1.50	3.25
Canada	+37.1 Feb	+11.3 Q4	-2.0	1.21	1.00	-2.8	0.40	3.06
Euro area	-53.8 Jan	-90.2 Jan	-1.0	0.76	0.63	-5.3	1.44	3.14
Austria	-3.5 Jan	+16.8 Q3	+1.5	0.76	0.63	-4.6	1.42	4.12
Belgium	+8.2 Jan	-12.1 Dec	-1.4	0.76	0.63	-4.4	1.43	3.88
France	-79.9 Feb	-54.4 Feb	-2.2	0.76	0.63	-6.3	1.42	3.62
Germany	+234.6 Feb	+206.2 Feb	+4.5	0.76	0.63	-4.4	1.42	3.13
Greece	-63.2 Jan	-49.9 Jan	-12.6	0.76	0.63	-4.9	1.42	5.46
Italy	-18.4 Jan	-73.1 Jan	-2.6	0.76	0.63	-4.3	1.42	4.31
Netherlands	+50.2 Feb	+65.3 Q4	+5.9	0.76	0.63	-3.1	1.42	3.75
Spain	-131.7 Jan	-145.2 Jan	-7.5	0.76	0.63	-7.4	1.42	4.05
Czech Republic	+3.5 Feb	-7.2 Feb	-2.2	20.4	15.6	-3.6	2.44	5.62
Denmark	+6.7 Jan	+6.4 Feb	+1.0	5.65	4.68	-2.0	2.85	3.68
Hungary	-0.2 Feb	-13.0 Q4	-3.7	221	159	-2.7	9.69	10.20
Norway	+73.7 Feb	+83.4 Q4	+10.9	6.74	4.96	10.6	2.93	3.91
Poland	-22.2 Feb	-25.5 Feb	-4.9	3.23	2.14	-2.2	4.16	6.09
Russia	+159.3 Feb	+98.9 Q4	-2.2	33.5	23.4	-8.0	13.00	10.86
Sweden	+14.3 Feb	+40.3 Q4	+7.3	8.29	5.89	-4.7	0.13	3.10
Switzerland	+18.4 Feb	+53.3 Q4	+7.5	1.15	1.00	-2.0	0.40	2.07
Turkey	-60.8 Feb	-33.1 Feb	-3.4	1.60	1.32	-4.2	11.21	7.69‡
Australia	+2.2 Feb	-44.1 Q4	-5.2	1.39	1.06	-3.1	3.19	4.58
Hong Kong	-25.1 Feb	+30.6 Q4	+8.1	7.75	7.79	-4.0	0.90	1.90
India	-113.3 Feb	-37.5 Q4	-3.4	49.7	40.0	-7.3	4.08	7.51
Indonesia	+7.2 Feb	+0.6 Q4	-0.4	10,895	9,191	-2.9	8.98	8.85‡
Malaysia	+42.1 Feb	+39.1 Q4	+10.2	3.61	3.15	-8.7	2.09	3.32‡
Pakistan	-18.7 Mar	-15.3 Q4	-5.8	80.6	63.5	-6.4	13.32	19.49‡
Singapore	+16.3 Mar	+27.1 Q4	+15.4	1.50	1.35	-4.1	0.59	1.96
South Korea	-2.8 Mar	+0.7 Feb	+1.9	1,338	989	-3.5	2.41	4.82
Taiwan	+9.8 Mar	+25.0 Q4	+7.9	33.8	30.2	-5.0	0.85	1.45
Thailand	+6.1 Feb	+4.5 Feb	+2.0	35.4	31.5	-4.7	1.55	2.72
Argentina	+13.1 Feb	+7.6 Q4	-0.5	3.68	3.16	-0.8	14.56	na
Brazil	+25.0 Mar	-25.7 Feb	-2.0	2.20	1.67	-1.9	11.16	6.16‡
Chile	+4.6 Mar	-3.4 Q4	-3.8	580	456	-3.5	2.52	3.42‡
Colombia	+2.1 Feb	-6.8 Q4	-4.0	2,383	1,802	-3.3	7.33	6.58‡
Mexico	-16.0 Feb	-2.4 Q4	-3.5	13.2	10.5	-3.2	6.06	7.51
Venezuela	+39.2 Q4	+39.2 Q4	+0.1	6.33	3.70§	-5.3	17.25	6.55‡
Egypt	-26.8 Q4	-1.3 Q4	-0.5	5.64	5.42	-7.0	10.47	3.48‡
Israel	-12.8 Feb	+1.6 Q4	+1.9	4.17	3.47	-5.0	0.59	3.39
Saudi Arabia	+197.4 2008	+124.0 2008	-8.0	3.75	3.75	-8.7	0.97	na
South Africa	-8.0 Feb	-21.0 Q4	-7.0	9.17	7.92	-3.3	8.65	8.50

*Merchandise trade only. †The Economist poll or Economist Intelligence Unit forecast. ‡Dollar-denominated bonds. §Unofficial exchange rate.

Markets

Apr 16th 2009
From The Economist print edition

Markets

		% change on		
			Dec 31st 2008	
	Index Apr 15th	one week	in local currency	in $ terms
United States (DJIA)	8,029.6	+2.5	−8.5	−8.5
United States (S&P 500)	852.1	+3.3	−5.7	−5.7
United States (NAScomp)	1,626.8	+2.3	+3.2	+3.2
Japan (Nikkei 225)	8,743.0	+1.7	−1.3	−10.0
Japan (Topix)	835.3	+2.5	−2.8	−11.4
China (SSEA)	2,661.9	+8.0	+39.2	+39.0
China (SSEB, $ terms)	167.7	+8.0	+51.4	+51.2
Britain (FTSE 100)	3,968.4	+1.1	−10.5	−6.7
Canada (S&P TSX)	9,246.1	+3.1	+2.9	+5.1
Euro area (FTSE Euro 100)	696.4	+3.3	−6.7	−11.5
Euro area (DJ STOXX 50)	2,263.0	+3.5	−7.5	−12.4
Austria (ATX)	1,851.3	+3.5	+5.7	+0.2
Belgium (Bel 20)	1,848.3	+4.4	−3.2	−8.2
France (CAC 40)	2,985.7	+2.2	−7.2	−12.0
Germany (DAX)*	4,549.8	+4.4	−5.4	−10.3
Greece (Athex Comp)	1,928.3	+6.7	+7.9	+2.3
Italy (S&P/MIB)	17,811.0	+5.1	−8.5	−13.2
Netherlands (AEX)	235.9	+3.4	−4.1	−9.1
Spain (Madrid SE)	915.3	+3.7	−6.2	−11.1
Czech Republic (PX)	840.2	+3.3	−2.1	−7.1
Denmark (OMXCB)	221.4	+2.1	−2.1	−7.3
Hungary (BUX)	12,212.1	−0.7	−0.2	−13.5
Norway (OSEAX)	275.6	+5.0	+2.0	+6.0
Poland (WIG)	28,275.0	+3.3	+3.8	−4.8
Russia (RTS, $ terms)	805.9	+6.0	+39.8	+27.5
Sweden (OMXS30)†	729.6	+3.2	+10.2	+5.0
Switzerland (SMI)	5,065.4	+1.3	−8.5	−15.1
Turkey (ISE)	28,324.3	+2.4	+5.4	+1.5
Australia (All Ord.)	3,693.9	+3.5	+0.9	+3.3
Hong Kong (Hang Seng)	15,669.6	+8.3	+8.9	+8.9
India (BSE)	11,284.7	+5.0	+17.0	+14.7
Indonesia (JSX)	1,593.7	+8.7	+17.6	+17.6
Malaysia (KLSE)	956.7	+5.4	+9.1	+4.7
Pakistan (KSE)	7,807.1	+6.4	+33.1	+30.8
Singapore (STI)	1,906.0	+6.8	+8.2	+3.7
South Korea (KOSPI)	1,333.1	+5.6	+18.6	+11.6
Taiwan (TWI)	5,875.2	+7.9	+28.0	+24.3
Thailand (SET)	453.9	+2.3	+0.9	−1.0
Argentina (MERV)	1,214.9	+4.5	+12.5	+5.7
Brazil (BVSP)	45,272.0	+2.5	+20.6	+27.6
Chile (IGPA)	12,554.3	+3.4	+10.9	+21.8
Colombia (IGBC)	8,131.5	−0.3	+7.5	+1.5
Mexico (IPC)	21,861.4	+6.5	−2.3	+2.6
Venezuela (IBC)	43,966.1	+0.7	+25.3	+34.9
Egypt (Case 30)	4,801.9	+1.0	+4.5	+2.2
Israel (TA-100)	716.5	+3.6	+27.0	+14.9
Saudi Arabia (Tadawul)	5,377.2	+6.7	+12.0	+12.0
South Africa (JSE AS)	21,319.9	+4.3	−0.9	nil
Europe (FTSEurofirst 300)	788.2	+3.4	−5.3	−10.2
World, dev'd (MSCI)	863.5	+3.3	−6.2	−6.2
Emerging markets (MSCI)	643.9	+5.5	+13.5	+13.5
World, all (MSCI)	217.9	+3.6	−4.3	−4.3
World bonds (Citigroup)	767.7	+0.6	−5.2	−5.2
EMBI+ (JPMorgan)	420.1	+1.1	+7.3	+7.3
Hedge funds (HFRX)§	1,034.6	+0.4	+1.4	+1.4
Volatility, US (VIX)	36.2	38.9	40.0	(levels)
CDSs, Eur (iTRAXX)‡	177.8	−4.1	−12.0	−16.6
CDSs, N Am (CDX)‡	235.6	−10.5	+1.0	+1.0
Carbon trading (EU ETS) €	13.9	+8.7	−13.9	−18.4

*Total return index. †New series. ‡Credit-default swap spreads, basis points. Sources: National statistics offices, central banks and stock exchanges; Thomson Datastream; Reuters; WM/Reuters; JPMorgan Chase; Bank Leumi le-Israel; CBOE; CMIE; Danske Bank; EEX; HKMA; Markit; Standard Bank Group; UBS; Westpac. §Apr 14th

House prices

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House prices have been falling in most rich countries, according to the OECD, a Paris-based think-tank. But they will have to fall still more in most countries if affordability, measured by the ratio of house prices to income, is to return to its long-term average. Germany, Japan and Switzerland are exceptions, with ratios that are now well below their historical averages. These countries are also the only places in the OECD's list where the price-to-rent ratio is lower than it has historically been. Houses are still less affordable than in the past in most other rich countries, including Ireland, Spain and Britain, where house prices have fallen rapidly over the past year as property bubbles have burst.